



## Summary

### Main Features

#### E-SURVEY FOR THIS PUBLICATION

The ABS would appreciate user feedback on the usefulness and relevance of **Australian Labour Market Statistics** (cat. no. 6105.0). As such, we would like users of this publication to complete a short e-survey about this publication. We would encourage all users to complete the e-survey, as the responses you provide will help determine the future direction and content of **Australian Labour Market Statistics** (cat. no. 6105.0). To find the e-survey, follow the 'Feedback Form' link on the left hand side of this page.

#### NOTES

#### FORTHCOMING ISSUES

##### ISSUE (QUARTER)

October 2008  
January 2009  
April 2009

##### Release Date

3 October 2008  
16 January 2009  
2 April 2009

#### DATA CONTAINED IN THIS ISSUE

The statistics shown are the latest available at 26 June 2008. Data sources for the tables in this publication are listed in Appendix 1.

#### ELECTRONIC PRODUCTS

The spreadsheets and data cubes referenced in this publication are available on the ABS website at <<https://www.abs.gov.au>> [Access to all ABS products & statistics - By Catalogue Number - 6. Labour Statistics and Prices].

Data cubes containing Table 1.1. Measures of labour underutilisation, Table 1.2. Experimental volume measures of labour underutilisation and Table 2. Employment type and can be found in the details tab.

#### INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Labour Market Statistics Section on Canberra (02) 2652 7206.

For information about other Australian Bureau of Statistics (ABS) statistics and services, please refer to the back of this publication.

## Labour statistics news

### LABOUR STATISTICS NEWS

#### LABOUR THEME PAGE

The ABS Labour Theme Page, available on the ABS website, provides a guide to the range of ABS statistics on the labour market, as well as links to the latest data released. To find the Theme Page, go to <<https://www.abs.gov.au>> [Themes - People - Labour].

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#### INTRODUCING THE QUARTERLY LABOUR FORCE UNDERUTILISATION RATE

A new series, the Quarterly Labour Force Underutilisation Rate is introduced in this issue of [Australian Labour Market Statistics](#) (cat. no. 6105.0). This quarterly time series replaces the existing annual rate which was first published in 2002 in [Information Paper: Measures of Labour Underutilisation](#) (cat. no. 6296.0). The new quarterly series has a more conceptually correct basis than the annual rate, and has provided the opportunity to produce more frequent and timely measures of changes in underemployment, and in turn, the underutilisation rate. For more information and for details of future dissemination of both the quarterly and annual series, please see the 'Quarterly labour force underutilisation rate' article in this issue.

## UPDATE OF THE VOLUME MEASURES OF UNDERUTILISATION

The experimental volume measures have now been updated for 2007 and are presented in the spotlight section of this publication. A spreadsheet containing a time series of the volume measures is now available on the ABS website. To find the spreadsheet go to <<https://www.abs.gov.au>> [Statistics - By Catalogue Number - 6. Labour Statistics and Prices - 61. Labour statistics - general]. The spreadsheet can be found under the 'Details' tab in this July 2008 issue of [Australian Labour Market Statistics](#) (cat. no. 6105.0).

## SUPPLEMENTARY SURVEYS ON LABOUR TOPICS

The Monthly Population Survey comprises the Labour Force Survey and a range of supplementary surveys, which provide detailed information on a range of topics. Results from surveys on labour-related topics recently released include: [Employee Earnings, Benefits and Trade Union Membership, Australia](#) (cat. no. 6310.0) and [Forms of Employment, Australia](#) (cat. no. 6359.0).

## EMPLOYMENT TYPE

The spreadsheet containing the annual time series on employment type has now been updated for 2007. The 2001 to 2006 data have also been updated using the new LFS method of composite estimation. To find the spreadsheet go to <<https://www.abs.gov.au>> [Statistics - By Catalogue Number - 6. Labour Statistics and Prices - 61. Labour statistics - general]. The spreadsheet is listed under the 'Details' tab in this July 2008 issue of [Australian Labour Market Statistics](#) (cat. no. 6105.0). The spreadsheet includes estimates of employment type by sex and full-time/part-time status for each of the following variables: age (five year age groups), state of usual residence, industry and occupation. For more information see the Spotlight section of this publication.

For more information on the new method of composite estimation, see [Information Paper: Forthcoming Changes to Labour Force Survey Products, 2007](#) (cat. no. 6292.0).

## NEW EMPLOYEE EARNINGS TIME SERIES DATA AVAILABLE

The Employee Earnings, Benefits and Trade Union Membership spreadsheets now contain a time series of mean and median weekly earnings in main job and all jobs, by sex, from 1975 to 2007. This complements the existing employee earnings series which contains mean weekly earnings (in main job) cross-classified by a number of variables, including: sex, age, industry, occupation, full-time/part-time status and sector, for the period 1990 to 2007. To find the spreadsheets, go to <<https://www.abs.gov.au>> [Statistics - By Catalogue Number - 6. Labour Statistics and Prices - 63. Earnings, hours and employment conditions]. The spreadsheets can be found under the 'Details' tab in [Employee Earnings, Benefits and Trade Union Membership, Australia](#) (cat. no. 6310.0).

## REDUCED SAMPLE SIZE FOR THE LABOUR FORCE SURVEY

The ABS is facing a tight budget situation in 2008-09, and this has led to a range of reductions in the ABS work program. One of the consequences of this is that from July 2008 the sample size of the LFS will be reduced by 24% when compared with the June 2008 sample being implemented under the 2006 sample design. The ABS is implementing this sample reduction in such a way that the sample can be easily increased again in the future should the ABS funding position change.

For further information about the sample reduction, see the April 2008 issue of [Labour Force, Australia](#) (cat. no. 6202.0).

## JOB VACANCIES SURVEY

The Survey of Job Vacancies will not be conducted during 2008-09. The May 2008 issue of the publication [Job Vacancies, Australia](#) (cat. no. 6354.0), released on 26 June 2008, was the final issue for 2007-08. The survey may be reinstated in 2009-10.

## ABS EMAIL NOTIFICATION SERVICE

By subscribing to this free service, you will be kept informed via email of the latest releases of ABS products. To subscribe, follow the link from the ABS home page <<https://www.abs.gov.au>>, provide your email address, and select your topics of interest.

### Recent and upcoming statistical releases

Release date/title of publication	Reference period	Catalogue number
June 2008		
Australian Economic Indicators	(a) July 2008	1350.0
Information Paper: Update on ANZSIC Implementation	(a) 2008	1295.0.55.001

Industrial Disputes, Australia	March quarter 2008	6321.0.55.001
Job Vacancies, Australia	May 2008	6354.0
Labour Force, Australia	May 2008	6202.0
Labour Force, Australia, Spreadsheets	May 2008	6202.0.55.001
Labour Force, Australia - Detailed Delivery, Monthly	May 2008	6291.0.55.001
Labour Force, Australia - Detailed Delivery, Quarterly	May 2008	6291.0.55.003
Labour Force Status and Other Characteristics of Migrants, Australia - Confidentialised Unit Record File on CD-ROM	November 2007	6250.0.25.002
Labour Force Status and Other Characteristics of Recent Migrants - Expanded Confidentialised Unit Record File, Technical Manual	November 2007	6250.0.55.001
July 2008		
Australian Economic Indicators	(a)August 2008	1350.0
Australian Labour Market Statistics	(a)July 2008	6105.0
Australian Social Trends	(a)2008	4102.0
Information Paper: Labour Force Survey Sample Design	(a)November 2007	6269.0
Labour Force, Australia	June 2008	6202.0
Labour Force, Australia, Spreadsheets	June 2008	6202.0.55.001
Labour Force, Australia - Detailed Delivery, Monthly	June 2007	6291.0.55.001
Labour Force, Australia: Labour Force Status and Other Characteristics of Families - Electronic Delivery	June 2008	6224.0.55.001
August 2008		
Australian Economic Indicators	(a)September 2008	1350.0
Average Weekly Earnings, Australia	May 2008	6302.0
Labour Force, Australia	July 2008	6202.0
Labour Force, Australia, Spreadsheets	July 2008	6202.0.55.001
Labour Force Survey Standard Errors, Data Cube	July 2008	6298.0.55.001
Labour Force, Australia - Detailed Delivery, Monthly	July 2007	6291.0.55.001
Labour Mobility, Australia	February 2008	6209.0
Labour Price Index, Australia	June 2007	6345.0
September 2008		
Australian Economic Indicators	(a)October 2008	1350.0
Australian and New Zealand Standard Industrial Classification (ANZSIC)	(a)2008	1292.0
Employment Arrangements, Retirement and Superannuation, Australia	April to July 2007	6361.0
Improvements to Family Estimates from the Labour Force Survey	(a)2008	6224.0.55.002
Industrial Disputes, Australia	June 2008	6321.0.55.001
Labour Force, Australia	August 2008	6202.0
Labour Force, Australia, Spreadsheets	August 2008	6202.0.55.001
Labour Force, Australia - Detailed Delivery, Monthly	August 2008	6291.0.55.001
Labour Force, Australia - Detailed Delivery, Quarterly	August 2008	6291.0.55.003
October 2008		
Australian Economic Indicators	(a)November 2008	1350.0
Australian Labour Market Statistics	(a)October 2008	6105.0
Employment Arrangements, Retirement and Superannuation, Australia - Confidentialised Unit Record File	April to July 2007	6361.0.55.001
Employment Arrangements, Retirement and Superannuation, Australia - Confidentialised Unit Record File, User Guide	April to July 2007	6361.0.55.002
Labour Force, Australia	September 2008	6202.0
Labour Force, Australia, Spreadsheets	September 2008	6202.0.55.001
Labour Force, Australia - Detailed Delivery, Monthly	September 2008	6291.0.55.001

(a) Refers to the issue of the publication, not the reference period.

## Labour Market Summary

### LABOUR MARKET SUMMARY

#### KEY MEASURES

Measure		Series type	Period	Current figure	% CHANGE FROM	
					Previous quarter(a)	Previous year(b)
Employed						
Persons	'000	Trend	May 2008	10 705.3	0.4	2.5
Full-time	'000	Trend	May 2008	7 651.7	0.4	2.1
Part-time	'000	Trend	May 2008	3 053.6	0.7	3.5
Part-time employment as a proportion of total employment	%	Trend	May 2008	28.5	(c)0.1	(c)0.3
Unemployed						
Persons	'000	Trend	May 2008	465.5	1.2	-1.7
Looking for full-time work	'000	Trend	May 2008	318.6	2.5	-3.0
Looking for part-time work	'000	Trend	May 2008	146.9	-1.5	1.0
Unemployment rate						
Persons	%	Trend	May 2008	4.2	(c)0.0	(c)-0.2
Long-term unemployment						
Persons	'000	Trend	May 2008	72.9	3.3	-0.7
As a proportion of total unemployment	%	Trend	May 2008	15.7	(c)0.3	(c)0.2
Annual labour underutilisation rates(d)						
Long-term unemployment rate	%	Original	Sep 2007	0.7	na	(c)-0.2
Unemployment rate	%	Original	Sep 2007	4.2	na	(c)-0.5
Underemployment rate	%	Original	Sep 2007	4.7	na	(c)-0.3
Labour force underutilisation rate	%	Original	Sep 2007	8.9	na	(c)-0.8
Extended labour force underutilisation rate	%	Original	Sep 2007	9.9	na	(c)-0.6
Children living without an employed parent(e)	%	Original	Jun 2007	13.7	na	(c)-0.7
Labour force participation rate						
Persons aged 15-64 years	%	Original	May 2008	76.5	(c)-0.1	(c)0.2
Total	%	Trend	May 2008	65.3	(c)0.1	(c)0.4
Actual hours worked						
Aggregate weekly hours	mill. hours	Original	May 2008	369.3	-0.2	2.0
Average weekly hours - Persons	hours	Original	May 2008	34.6	-0.6	-0.2
Average weekly hours - Full-time	hours	Original	May 2008	41.7	0.4	-
Average weekly hours - Part-time	hours	Original	May 2008	16.9	-1.7	0.8
Part-time workers						
Proportion who preferred to work more hours	%	Original	May 2008	22.4	(c)-0.9	(c)-1.5
Wage price index						
Total hourly rates of pay excluding bonuses	index no.	Original	Mar qtr 2008	117.6	0.9	4.1
Average weekly earnings						
Full-time adult ordinary time earnings	\$	Trend	Feb 2008	1 123.30	0.9	4.5
All employees total earnings	\$	Trend	Feb 2008	885.40	0.6	3.3
Compensation of employees						

Household income account	\$m	Trend	Mar qtr 2008	135 104	1.3	7.1
Average earnings (National Accounts basis nominal) per week \$		Trend	Mar qtr 2008	1 103	0.5	4.0
Industrial disputes						
Working days lost	'000	Original	Mar qtr 2008	42.8	75.4	517.6
Working days lost per 1,000 employees	number	Original	Mar qtr 2008	4.6	73.7	501.7
Job vacancies						
Australia	'000	Trend	May 2008	183.6	1.1	9.0

- nil or rounded to zero (including null cells)

na not available

(a) Same period previous quarter (monthly data is presented for the middle month of each quarter).

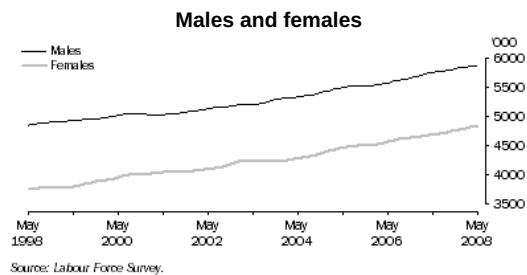
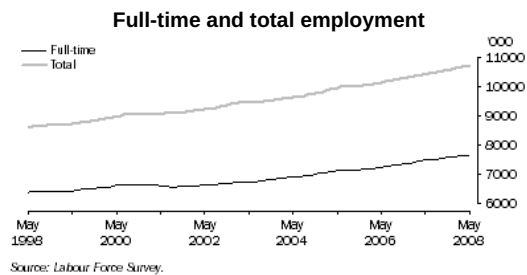
(b) Same period previous year.

(c) Change is in percentage points.

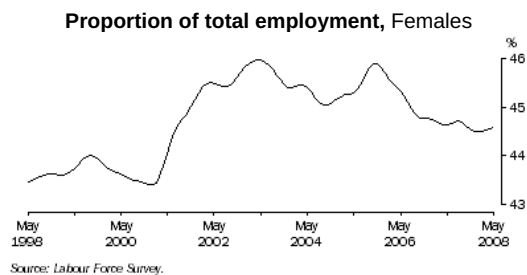
(d) See table 4.1 or the Glossary for further explanation of labour underutilisation rates.

(e) As a proportion of all children aged under 15 years. See the Explanatory Notes for information on family data.

## EMPLOYMENT: TREND SERIES

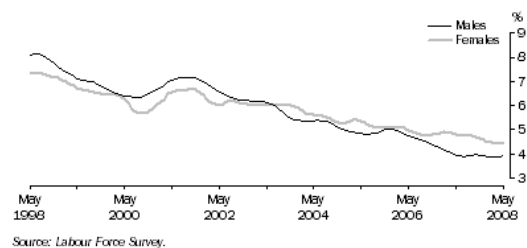


## PART-TIME EMPLOYMENT: TREND SERIES

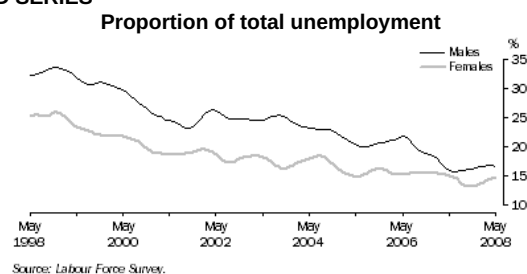


## UNEMPLOYMENT RATE: TREND SERIES

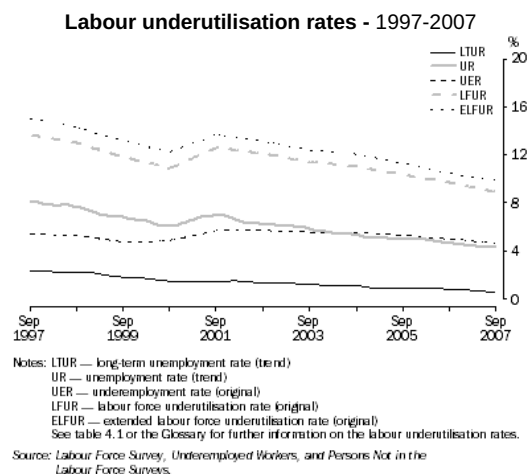
### Males and females



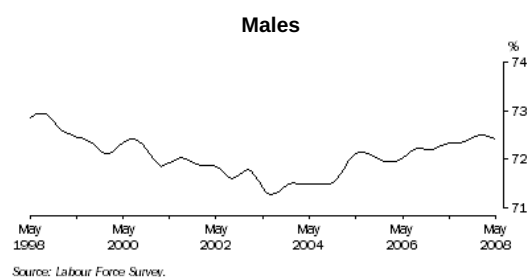
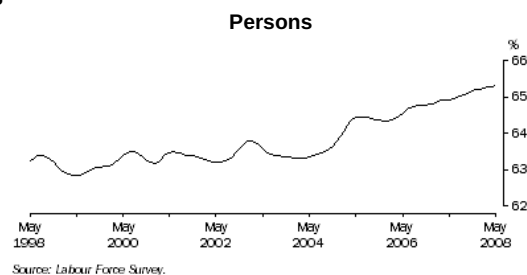
## LONG-TERM UNEMPLOYMENT: TREND SERIES

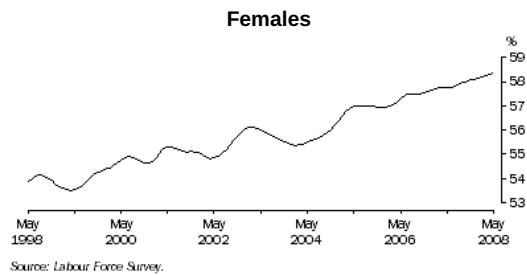


## UNDERUTILISED LABOUR



## PARTICIPATION RATE: TREND SERIES





## AVERAGE WEEKLY EARNINGS: TREND SERIES

Full-time adult ordinary time earnings, Quarterly change

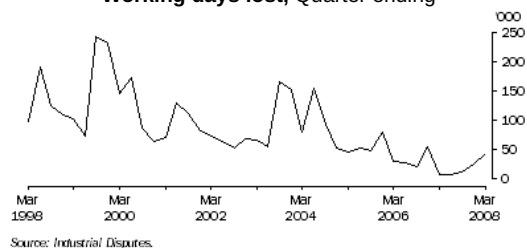


All employees total earnings, Level



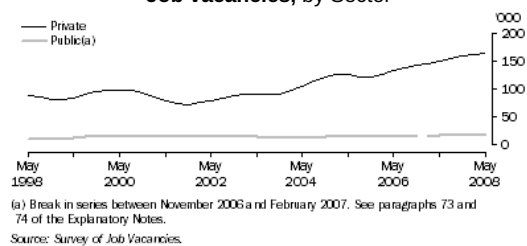
## INDUSTRIAL DISPUTES: ORIGINAL SERIES

Working days lost, Quarter ending



## JOB VACANCIES: TREND SERIES

Job vacancies, by Sector



## Provide feedback

We have added a feedback form to this issue of *Australian Labour Market Statistics*, to obtain feedback from clients and to ensure that the product continues to meet your needs.

Feedback Form (by clicking on this link, you will open a new window, and will be directed to a secure website, external to the Australian Bureau of Statistics).

## About this Release

This publication draws together labour statistics from a range of ABS household and business surveys, to provide an overall picture of the labour market. The key purpose of this publication is to raise awareness of the data available, so that users will be able to use it more effectively.

It contains tables for core data items, presenting the most recent data available at a particular date (rather than relating to a particular reference period). It is also able to be used to announce the release of supplementary surveys and infrequent surveys. Note that, in addition to a brief article in this publication, these would also have separate releases, which would not be delayed by the release in this publication.

The publication is also used to release annual data on Indigenous labour force status, and annual supplementary measures of labour underutilisation. It includes a range of feature articles, both analytical and technical, which will assist users in understanding and interpreting the data and will also promote the range of data available from the ABS labour statistics program. It will be used to announce any changes to labour series or releases.

The publication contains brief explanatory notes, outlining each data source, but referring to the relevant releases, and to Labour Statistics: Concepts, Sources and Methods 6102.0.55.001, for more detail.

## Quarterly Labour Force Underutilisation Rate (Feature Article)

This article was published in the July 2008 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

### QUARTERLY LABOUR FORCE UNDERUTILISATION RATE

#### INTRODUCTION

Labour underutilisation is the extent to which available labour is underutilised - either through unemployment or underemployment (**end note 1**). The extent to which available labour is underutilised is of interest from a number of perspectives. From an economic perspective, there is interest in the amount of spare capacity in the labour supply and its potential to contribute to the production of goods and services. From a social viewpoint, there is concern that people whose aspirations for work are not being met may suffer financially, personally and socially.

In Australia, the labour force underutilisation rate is defined as the sum of the number of people unemployed and the number underemployed, expressed as a proportion of the labour force. It can also be viewed as the sum of the unemployment rate and the underemployment rate.

Until recently the annual Underemployed Workers Survey (UEW) conducted in September has been the prime source of information on underemployed workers for compiling the labour force underutilisation rate. However, since February 2003 the ABS has also been collecting quarterly data on underemployed workers in the Labour Force Survey (LFS). This quarterly time series has a more conceptually correct basis, and has provided the opportunity to produce more frequent and timely measures of changes in underemployment and, in turn, the underutilisation rate.

This article presents for the first time quarterly estimates of labour force underutilisation. This quarterly labour force underutilisation rate (QLFUR) replaces the existing annual rate which was first published in **Information paper - Measures of labour underutilisation** (cat. no. 6296.0) in 2002 and subsequently published annually in **Australian Labour Market Statistics** (cat. no. 6105.0), for September 1994 to September 2007.

#### BACKGROUND

Quarterly estimates of underemployment consistent with ILO definitions are available from the LFS from May 2001 onwards. Prior to this, it was not possible for the ABS to produce estimates of underemployed part-time workers entirely consistent with ILO definitions.

Information on the number of part-time workers who prefer to work more hours was collected monthly in the LFS, from February 1978 to March 2001. While this provides a proxy measure of the number of underemployed part-time workers, information on the 'availability' to work more hours was not collected. Thus estimates of underemployment, consistent with the ILO definition, could not be made.

Data on part-time workers who prefer to work more hours have been collected quarterly (February, May, August, November) in the LFS since May 2001. At this time an additional question was added to the LFS questionnaire to determine whether part-time workers preferring to work more hours were available to work more hours in the reference week (**end note 2**). While this additional information provided a closer approximation of the number of underemployed part-time workers, it still did not allow for estimates fully consistent with the ILO definition. This was addressed in February 2003 when a further question was added to the LFS to determine availability within the next four weeks, thus allowing the number of underemployed part-time workers (consistent with ILO definitions) to be measured. Using the information on the changes arising from the additional question being asked, it has been possible to develop synthetic estimates, using the full definition, for the period May 2001 to November 2002 to extend the QLFUR series back to May 2001 (**end note 3**).

Graph 1 shows the trend estimates of the QLFUR from May 2001. Also presented is the proxy underutilisation rate available from February

1978 to May 2006 (with a break in series at May 2001). This February 1978 to May 2006 series uses the broader measure for underemployed workers (part-time workers who prefer more hours), while the QLFUR series from May 2001 is consistent with the ILO definition (part-time workers who prefer more hours and are available in the reference week or within four weeks).

### 1. Labour force underutilisation rates, Persons: Trend - Feb 1978 - May 2008



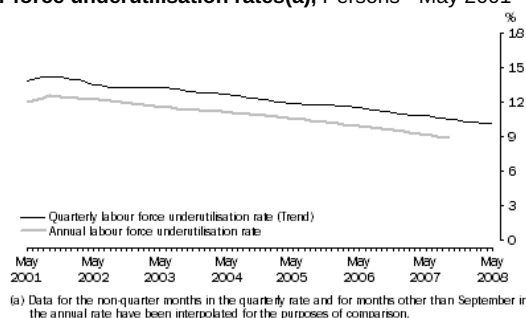
In the graph above, the February 1978 to February 2001 series has been extended to May 2006, to give an indication of the difference between the QLFUR and the proxy underutilisation rate. This extended series is higher than the QLFUR as it includes all part-time workers who prefer to work more hours, irrespective of whether they were available. However, as approximately 90% of part-time workers who prefer to work more hours in the period from May 2001 onwards were also available to work more hours (either in the reference week or within four weeks), the difference between the QLFUR and the proxy measure for the period from May 2001 to May 2006 is relatively small (less than one percentage point).

Fluctuations in the labour force underutilisation rate are closely associated with the economic cycle. The sharp rises in the proxy underutilisation rate in the early 1980s and again in the early 1990s both coincided with economic recessions in Australia. Similarly, the consistent downward trend in the labour force underutilisation rate following the peak of 1993 has occurred during a period of sustained economic growth.

### COMPARISON WITH THE ANNUAL RATE

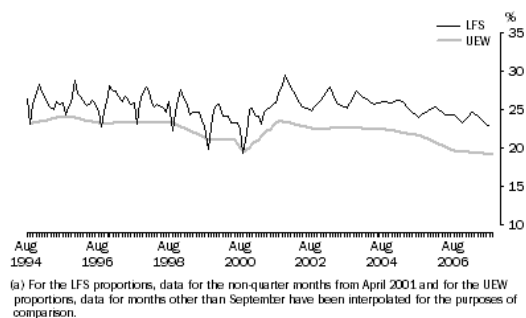
Prior to the introduction of the QLFUR, the annual Underemployed Workers Survey (UEW), conducted in September, has been one of the main sources for information on estimates of underutilisation rates. Comparison of the annual estimates and the quarterly series have identified some variations between these estimates. Specifically the QLFUR has been consistently higher than the annual labour force underutilisation rate in all periods that the quarterly data have been collected. Between May 2001 and May 2008, the quarterly trend labour force underutilisation rate for August (the closest quarter month to the annual series) was between 1.2 and 1.8 percentage points higher than the annual rate (Graph 2). The unemployed component of both the quarterly and annual labour force underutilisation rates are sourced from the LFS, and have been comparable over the period since May 2001. Therefore, the main reason for the difference between the quarterly and annual labour force underutilisation rate is the measure of underemployment from the different sources ie the monthly LFS and the annual UEW.

### 2. Labour force underutilisation rates(a), Persons - May 2001 - May 2008



The ABS has identified that it is the difference in the proportion of part-time workers who preferred to work more hours which accounts for the difference between the quarterly and annual measure of labour underutilisation (Graph 3). Prior to April 2001, the question to determine this group was asked in the LFS each month and people were sequenced into the UEW survey in September based on their response (**end note 4**). As graph 3 shows, in each September (from 1994 to 2000) there is a marked decrease in the proportion of part-time workers who preferred more hours. Although it could be argued that this simply shows a seasonal low, analysis of monthly data prior to 1994 shows no evidence of a seasonal low in September, but rather shows a low in May 1988 and May 1991 (when the UEW survey was previously conducted).

### 3. Proportion of part-time workers preferring to work more hours(a)



This supports the conclusion that the difference between the proportion of part-time workers preferring more hours in the quarterly series and the annual series is mainly due to a supplementary survey effect. A supplementary survey effect is said to occur when the collection of a survey (i.e. additional questions) has a measurable impact on the data collected due to either interviewer or respondent bias. It is suggested that the collection of the UEW survey may affect the way respondents answer questions relating to part-time workers preferring to work more hours.

In the UEW survey, when a respondent indicates that they (or the person for whom they are responding) prefer to work more hours, they are sequenced through up to 16 additional questions about what they would prefer to do to work the extra hours (such as working in a different occupation or moving interstate), and their job search activities. This is not the case in the LFS. Therefore, a person who wants to limit the time and effort required to complete the UEW survey may be inclined to alter their responses to the question regarding preference for more hours.

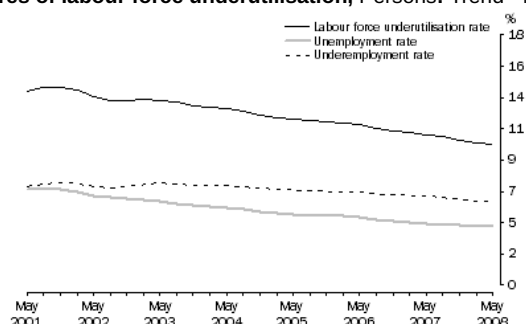
Although the UEW survey provides lower level estimates of underemployed people, it is still a valuable source of information about what they would prefer to do to work the extra hours (such as working in a different occupation or moving interstate) and their job search activities. It is also currently the only survey which looks at their spare capacity to work more hours to determine how many extra hours of work they can offer the labour market.

## COMPONENTS OF THE QLFUR

In order to produce a quarterly labour force underutilisation rate it is necessary to produce a quarterly unemployment and underemployment rate. The ABS calculates seasonally adjusted and trend unemployment rates on a quarterly basis for the purposes of producing the QLFUR. As these estimates are derived only from data collected in the quarter months, they will differ slightly from the official monthly seasonally adjusted and trend unemployment rates published in **Labour Force, Australia** (cat. no. 6202.0) and associated electronic products. Although users will be able to derive seasonally adjusted and trend unemployment rates for quarter months from the QLFUR data, these should not be used in place of the official monthly estimates.

Graph 4 shows the relative contributions of unemployment and underemployment to the labour force underutilisation rate. In May 2001, the trend quarterly unemployment rate and trend quarterly underemployment rate contributed almost equally to the labour force underutilisation rate (6.8% and 7.1% respectively). That is, there were roughly equal numbers of unemployed and underemployed. Since that time, however, the trend quarterly unemployment rate has fallen by approximately 2.7 percentage points (to 4.2% in May 2008). The trend quarterly underemployment rate also fell over the period, although the decline was much less pronounced (1.1 percentage points to 6.0% in May 2008). The result of these trends is that the quarterly underemployment rate has assumed a larger proportion of the labour force underutilisation rate over time. Given that these trends have occurred during a period of sustained economic growth, this may reflect the fact that the unemployment rate is more sensitive to fluctuations in the economic cycle than the underemployment rate.

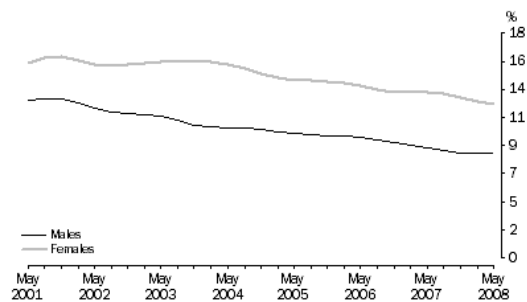
### 4. Quarterly measures of labour force underutilisation, Persons: Trend - May 2001 - May 2008



## SEX

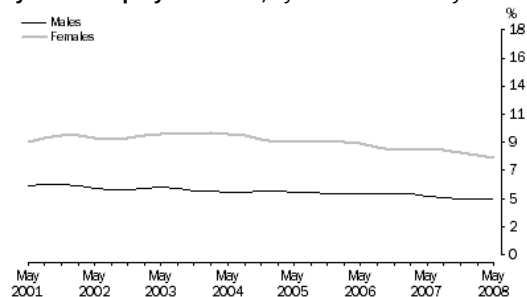
The quarterly labour force underutilisation rate has fallen considerably for both men and women over the period from May 2001 to May 2008. There have, however, been considerable differences between the level of the QLFUR for men and women (Graph 5).

### 5. Quarterly labour force underutilisation rate, by Sex: Trend - May 2001 - May 2008

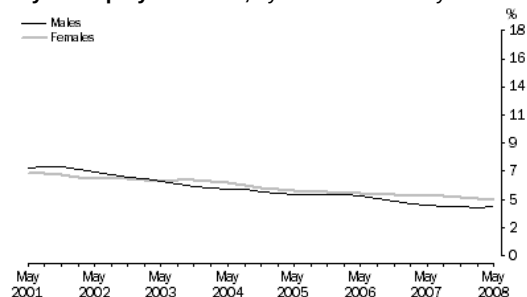


Since May 2001, the female trend labour force underutilisation rate has been consistently higher than that for males. The trend QLFUR rate for men has ranged between a high of 12.8% in August 2001 and a low of 8.4% in May 2008. The rate for women, on the other hand, varied between a high of 16.1% in November 2001 and a low of 12.3% in May 2008. The higher labour force underutilisation rate for women is largely due to the fact that the female trend quarterly underemployment rate has been considerably higher than the male rate for the entire period from May 2001 to May 2008 (Graph 6). In fact, while the trend quarterly unemployment rates for males and females have been relatively similar (Graph 7), the female trend quarterly underemployment rate has consistently been between 3.4 and 4.7 percentage points higher than the male rate.

#### 6. Quarterly underemployment rate, by Sex: Trend - May 2001 - May 2008



#### 7. Quarterly unemployment rate, by Sex: Trend - May 2001 - May 2008



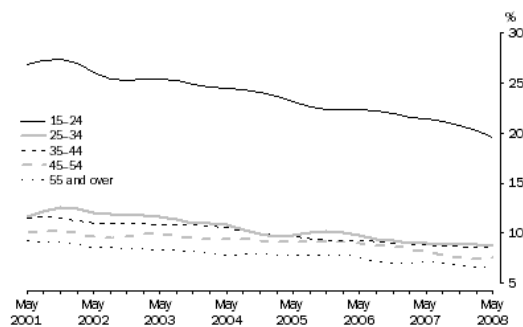
There have also been considerable differences between men and women in the relative contributions of unemployment and underemployment. While unemployment has historically been the main contributor to the male labour force underutilisation rate, a decline in the level of unemployment has seen an increase in the relative contribution of underemployment over time. Since May 2001, the male trend quarterly unemployment rate has fallen by 3.1 percentage points, while the quarterly underemployment rate has remained relatively steady (falling by 1.1 percentage points). As a result, the male trend quarterly underemployment rate has generally been higher than the male trend quarterly unemployment rate since November 2004.

The quarterly underemployment rate for females, by contrast, has been consistently higher than the female unemployment rate throughout the period from May 2001 to May 2008. This, in part, reflects the fact that women are more likely to work part time than men and that underemployment is largely associated with part-time work ([end note 5](#)).

## AGE

There is a marked difference in the QLFUR for people aged 15-24 years compared to other age groups (Graph 8). The quarterly trend labour force underutilisation rate for people aged 15-24 years was more than twice that for people in other age groups from May 2001 to May 2008. This may be due to the fact that young people, many of whom combine work with study, are more likely to be employed part time than those in older age groups. In May 2008, a large proportion (45%) of employed 15-24 year olds were working part time, and 72% of these were also studying full time. Younger people also have higher rates of unemployment than others.

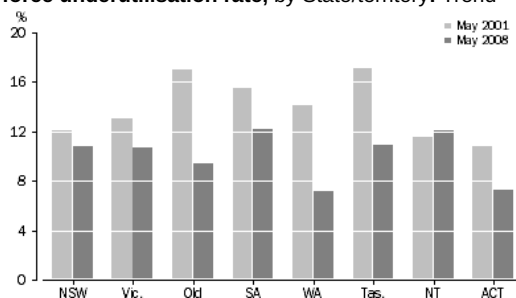
#### 8. Quarterly labour force underutilisation rate, by Age: Trend - May 2001 - May 2008



## STATE AND TERRITORY

Graph 9 shows the QLFUR in May 2001 and May 2008 by state and territory. WA and the ACT had the lowest quarterly trend labour force underutilisation rates (7.2% and 7.4% respectively) in May 2008. The QLFUR fell across all states and territories, except the NT, between May 2001 and May 2008 with the largest falls occurring in Qld and WA.

9. Quarterly labour force underutilisation rate, by State/territory: Trend - May 2001 & May 2008



The table below shows the quarterly unemployment rate and the quarterly underemployment rate by state and territory in May 2001 and May 2008. For most states and territories (except WA and the NT), the decrease in the unemployment rate has been the main contributor to the decrease in the QLFUR. However, in WA, there was a slightly larger decrease in the underemployment rate (3.6 percentage points compared with 3.4 percentage points for the unemployment rate). For the NT the decrease in the unemployment rate was countered by a slightly larger increase in the underemployment rate.

10. Components of the QLFUR, By state and territory: Trend - May 2001 and May 2008

	Unemployment rate			Underemployment rate		
	May-01 %	May-08 %	Difference(a) pp	May-01 %	May-08 %	Difference(a) pp
New South Wales	6.0	4.6	-1.5	6.0	6.3	0.2
Victoria	6.4	4.2	-2.2	6.7	6.6	-0.2
Queensland	8.6	3.8	-4.8	8.5	5.6	-2.9
South Australia	7.4	4.9	-2.5	8.1	7.3	-0.9
Western Australia	6.7	3.3	-3.4	7.5	3.8	-3.6
Tasmania	9.0	4.6	-4.4	8.1	6.4	-1.7
Northern Territory	7.1	3.9	-3.2	4.5	8.2	3.6
Australian Capital Territory	5.2	2.6	-2.6	5.6	4.8	-0.8
<b>Australia</b>	<b>6.8</b>	<b>4.2</b>	<b>-2.7</b>	<b>7.1</b>	<b>6.0</b>	<b>-1.1</b>

(a) Change is in percentage points. Discrepancies may occur due to rounding.

## DISSEMINATION

The quarterly labour force underutilisation rate is expected to be released in **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003) in the first half of 2009, as a time series spreadsheet containing original, seasonally adjusted and trend estimates for:

- males, females and persons by state and territory; and
- males, females and persons by age group (15-24, 25-34, 35-44, 45-54, 55 years and over, and all age groups).

The labour underutilisation tables (table 4.1 to 4.3) in the publication **Australian Labour Market Statistics** (cat. no. 6105.0), which currently contain the annual measures, will be updated to reflect the new quarterly series for the October 2008 issue.

The publication of the annual labour force underutilisation rate will cease once the quarterly rate is released. However, the UEW will continue to run in September each year as it collects detailed information about the characteristics of underemployed workers.

## Implications for other measures of labour underutilisation

The Extended Labour Force Underutilisation Rate (ELFUR) will continue to be published annually in the April edition of **Australian Labour**

**Market Statistics** (cat. no. 6105.0). Consideration is being given to changing the reference month from September to August to maintain consistency with the QLFUR reference month. A review is also being conducted which is looking at the population groups of people not in the labour force (PNILF) currently included in the ELFUR, as well as investigating whether any additional PNILF population groups should be included.

Similarly, consideration is being given to publishing the annual experimental volume measures of labour underutilisation based on August, rather than September, LFS data. This would ensure that the reference period for the volume measures of labour underutilisation are consistent with the QLFUR.

## FURTHER INFORMATION

For further information, please contact Tracey Chester (ph (02) 6252 5609 or email <tracey.chester@abs.gov.au>).

## END NOTES

1. Current international standards (Sixteenth International Conference of Labour Statisticians, 1998) recognise two forms of underemployment: time-related underemployment, which reflects insufficient hours of work; and inadequate employment situations, such as insufficient use of skills and experience or inadequate income. Inadequate employment situations encompass a number of factors such as the skill level of workers and their attitudes to work which are not easily quantified. As such, the international standards do not define inadequate employment situations. [<back](#)

According to the international standard, time-related underemployment exists when the hours of work of an employed person are below a threshold, and are insufficient in relation to an alternative employment situation in which the person is willing and available to engage. In other words, a person is considered underemployed if they worked less than a particular threshold of hours and wanted and were available to work more hours.

Within these conceptual definitions, there is room for each country to specify operational definitions to suit the characteristics of the domestic labour market. See **Glossary** for ABS definitions of underemployment and unemployment.

2. From May 2001, the question used in the LFS to identify part-time workers who prefer to work more hours was changed. This may have resulted in a break in the series 'Part-time workers preferring to work more hours'. [<back](#)

3. Due to the synthetic nature of the estimates from May 2001 to November 2002 no further disaggregation of the QLFUR for this period is possible. From February 2003, further disaggregation of the data can be requested (such as QLFUR for each state by age), but the data will only be available as original series (subject to confidentiality). [<back](#)

4. The Underemployed Workers Survey has been collected annually in September from 1994. Prior to that the Survey was conducted in May 1985, May 1988 and May 1991. [<back](#)

5. Underemployed part-time workers have consistently made up around 90% of all underemployed workers since May 2001. [<back](#)

## Underenumeration in the Labour Force Survey: Findings of a Census Data Enhancement Quality Study (Feature Article)

This article was published in the July 2008 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

### UNDERENUMERATION IN THE LABOUR FORCE SURVEY

### FINDINGS OF A CENSUS DATA ENHANCEMENT QUALITY STUDY

#### INTRODUCTION

The Census of Population and Housing is the largest statistical collection undertaken by the ABS. It aims to collect information about every person in Australia on Census Night.

During the period of Census processing, the ABS uses name and address information collected in the Census to assist in processing the data including the coding of family structure and checking undercount. After Census processing is complete, all names and addresses held by the ABS are destroyed.

For the 2006 Census, the ABS is undertaking a Census Data Enhancement project (CDE). As part of this project, the ABS is conducting a number of quality studies which bring together 2006 Census data and other specified datasets. The results of these studies will indicate the usefulness and validity of such linkages and will allow the ABS to make improvements to its collections.

An investigation into underenumeration in the Labour Force Survey (LFS) is a component of the LFS quality assurance program. The 2006 Census provides an opportunity to bring together information related to dwellings in both the LFS and the 2006 Census. For the study, a

linked dataset was created using names, addresses and other demographic variables from the 2006 Census and the August 2006 LFS. All names and addresses used to create this dataset, using clerical methods, were subsequently removed. The resulting dataset was only available to ABS officers and was destroyed on 30 June 2008.

This paper reports on the findings of the study. The three main purposes of this study were:

- to produce an estimate of underenumeration in the LFS, relative to the Census;
- to determine and compare the types of people, dwellings and geographies associated with high underenumeration; and
- to develop recommendations to reduce underenumeration in the LFS.

All of the CDE studies have strict data security procedures in place to ensure confidentiality. These procedures were followed in this quality study. For further information on the CDE project see the Statistician's CDE Project Statement of Intention, which is available on the ABS website, and the following ABS papers:

- **Methodology of Evaluating the Quality of Probabilistic Linking** (cat. no. 1351.0.55.018);
- **Enhancing the Population Census: Developing a Longitudinal View 2006** (cat. no. 2060.0); and
- **Census Data Enhancement Project: An Update** (cat. no. 2062.0).

## BACKGROUND

The LFS is a monthly household survey which collects information about the labour force status and other characteristics of the usually resident Australian civilian population aged 15 years and over. Estimates of employment, unemployment, and labour force participation published from the survey each month are used to inform key social and economic policies.

The LFS has an extensive quality assurance program which aims to ensure LFS estimates are of the highest standard. Despite these efforts, estimates from the LFS, and all surveys, are affected by various forms of error. One form of error is underenumeration.

Underenumeration arises when part of the target population is missed. This can occur, for example, when dwellings are missed in constructing the sampling frame. It can also occur when information is not obtained for all persons selected in the survey. Some groups within the population, for example young males, can be more difficult to contact than others. If this occurs, the group being underenumerated is not fully represented in the sample.

Benchmarking the estimates to population estimates by age and sex compensates for underenumeration of certain groups. However, to the extent that, within benchmark categories, the characteristics of enumerated persons are different to the characteristics of the people missed, a bias remains.

The limitations of the current study, discussed in the next section, prevent it being used to estimate the bias from underenumeration in the LFS. Rather, its results provide an indication of the characteristics and extent of LFS underenumeration.

## LIMITATIONS

This study measured underenumeration in the LFS through a comparison with the Census. Whilst the Census aims to collect information about everyone in Australia on Census night, it too is affected by underenumeration. The extent of underenumeration in the Census is estimated by the Census Post Enumeration Survey (PES), conducted three weeks after Census night (for details of Census undercount, see **Census of Population and Housing - Details of Undercount**, cat. no. 2940.0). As the CDE Quality Study of Labour Force Underenumeration did not include persons who were missed by the Census, it does not provide a complete measure of underenumeration in the LFS.

An additional limitation of the current study is the lower than anticipated linkage rate between LFS and Census records. Linkage rates in non-private dwellings (for example, hotels, caravan parks and Indigenous community dwellings) were extremely low with only 0.4% of addresses linked. Linkage results in LFS private dwellings were considerably higher with 71.3% of addresses linked. Consequently, the findings presented in this paper are for linked addresses for private dwellings only. The main hindrances to linking were the lack of detail in some LFS and Census address information and differences in address descriptions between the two collections.

The limitations of this study become evident when comparisons are made between the study's results and an indicative measure of underenumeration derived from the 'apparent enumeration rate'. This rate is calculated using the following formula:

**Actual LFS sample / Expected LFS sample x 100**

where 'Actual LFS sample' is the number of people who fully responded to the LFS, and 'Expected LFS sample' is the civilian population aged 15 years and over multiplied by the sampling fraction for a given State or Territory. The sampling fraction is the proportion of the civilian population aged 15 years and over intended to be selected in the survey, and is calculated as part of the sample design process. For example, the sampling fraction for New South Wales in August 2006 was 1/321. This means that one in every 321 people in New South Wales should be selected in the LFS sample.

The 'apparent enumeration rate' for the August 2006 LFS is 86.9%, which corresponds to an underenumeration rate of 13.1%. This is considerably higher than the underenumeration rate, relative to the Census, calculated in the present study. This discrepancy is not unexpected, as the underenumeration rate calculated in the present study does not account for:

- people who did not return a Census form;

- people in non-private dwellings; or
- people in private dwellings whose address could not be linked.

Another source of discrepancy is the treatment of people who are temporarily overseas. In the LFS, selection rules are applied at each dwelling in sample, with the aim of associating each person in the target population with one and only one dwelling. People who usually live in a private dwelling, but who are away for six weeks or more, are excluded from the LFS at their usual residence, and have their chance of selection in the survey at the place at which they are staying. If they are staying overseas, they have no chance of selection in the survey. Therefore, part of the apparent underenumeration rate is explained by the inclusion of people in the estimate of the civilian population aged 15 years and over, who in practice have no chance of selection in the LFS.

A further issue to be kept in mind when interpreting the results of the current study is the potential time gap between Census and LFS enumeration of each dwelling. The majority of LFS enumeration occurred in the two week period 7-20 August, with a small proportion of dwellings enumerated in the follow-up period 21-31 August. Census enumeration occurred over a longer period. Census Night was Tuesday 8 August, and the majority of Census enumeration occurred before the end of August. However, a small proportion of Census forms were completed before Census Night, and some were completed in September. If there was a time gap between collections for a particular dwelling, it could be as little as one day, but could be over 30 days. As a result, the mobility of people, and entire households, could have had an effect on the accuracy of the current analysis as there was no reliable way of differentiating between actual underenumeration and cases where occupants of a dwelling changed between the time of Census and LFS enumeration.

## THE POPULATION FOR ANALYSIS

For the purposes of this study, the population of interest is persons over 15 years of age who are usual residents in a private dwelling and who were enumerated at their usual residence on Census Night. These people were considered to be most likely to have been usual residents at the time of LFS enumeration, and therefore should have been enumerated in the LFS. Visitors to dwellings on Census Night were excluded from the analysis because their mobility would potentially distort the underenumeration analysis if they were not matched between the LFS and the Census. Those aged under 15 years were also excluded as they are out of the scope of the LFS. It should be noted that the population for the present study does not mirror the defined LFS population precisely, as it is likely to include a small number of persons who are normally out of the scope of the LFS, such as permanent members of the Australian defence forces.

The results of this study are based on unweighted counts. In other words, the data have not been inflated to represent the Australian population as a whole. Of greater interest for the purposes of this study are the raw counts and proportion of people missed in LFS, relative to those who were enumerated in the LFS sample.

For analysis, the population of interest was divided into two distinct groups: those missed in the LFS (but enumerated in the Census) and those enumerated in both the LFS and Census.

The LFS underenumeration rate was calculated using the following formula:

$$\text{Those missed in the LFS} / (\text{Those missed in the LFS} + \text{Those enumerated in both the LFS and Census}) \times 100$$

## RESULTS

### LFS Underenumeration rate relative to Census

The underenumeration rate calculated in this study is the proportion of people missed in the LFS, relative to the Census. Based on the results of the current study, the national underenumeration rate in the LFS, relative to the Census, is 5.0%.

The following paragraphs provide an indication of the characteristics of LFS underenumeration.

#### 1. Persons enumerated, LFS and Census

	No.	%
Enumerated in both LFS and Census	49 255	95.0
Missed in LFS	2 568	5.0
Total persons	51 823	100.0

### LFS Underenumeration by state/territory

The underenumeration rates, relative to the Census, varied considerably between the states and territories. The highest underenumeration rates were observed in Queensland (5.6%) and New South Wales (5.5%). The lowest underenumeration rates were observed in the ACT (2.4%) and Tasmania (2.9%).

#### 2. LFS Underenumeration, States and territories

State	Missed in LFS No.	Enumerated in both LFS and Census No.	Underenumeration rate %
New South Wales	673	11 496	5.5
Victoria	575	10 292	5.3
Queensland	550	9 307	5.6
South Australia	321	5 991	5.1
Western Australia	266	5 951	4.3

Tasmania	91	3 044	2.9
Northern Territory	32	749	4.1
Australian Capital Territory	60	2 425	2.4
<b>AUSTRALIA</b>	<b>2 568</b>	<b>49 255</b>	<b>5.0</b>

### LFS Underenumeration by sex and age groups

The underenumeration rate, relative to the Census, was higher for males (5.4%) than females (4.5%). For both the male and female populations, the underenumeration rates were highest in the 15-34 year old age group, with the highest underenumeration rate observed for males aged 25-34 (8.1%).

Substantially lower underenumeration rates were observed for persons 35 years and over, with underenumeration rates ranging from 3.5% for persons 75 years and over to 4.6% for persons 35-44 years.

### 3. LFS Underenumeration Rate, by sex and age groups

Age group (years)	Males %	Females %	Persons %
15-24	6.4	6.8	6.6
25-34	8.1	5.7	6.9
35-44	5.2	4.1	4.6
45-54	4.6	3.2	3.9
55-64	4.2	3.9	4.1
65-74	3.7	3.6	3.6
75 and over	3.6	3.3	3.5
<b>TOTAL</b>	<b>5.4</b>	<b>4.5</b>	<b>5.0</b>

### LFS Underenumeration by sex and registered marital status

The highest underenumeration rates, relative to the Census, were observed in the never married (7.3%) and separated (8.1%) populations. The lowest underenumeration rate was observed in the married population (3.2%). The highest underenumeration rate observed was for separated males (10.9%).

### 4. LFS Underenumeration Rate, by sex and registered marital status

Marital status	Males %	Females %	Persons %
Never married	7.6	6.9	7.3
Widowed	6.3	3.9	4.4
Divorced	7.5	4.6	5.8
Separated	10.9	5.9	8.1
Married	3.3	3.1	3.2
<b>TOTAL</b>	<b>5.4</b>	<b>4.5</b>	<b>5.0</b>

### LFS Underenumeration by sex and labour force status

High underenumeration rates, relative to the Census, were observed amongst those whose labour force status in the Census was unstated (10.9%), in the unemployed looking for full-time work population (10.1%) and the employer population (7.4%). Males whose labour force status was not stated (13.3%) and males looking for full-time work (11.1%) had the highest underenumeration rates observed in this study.

### 5. LFS Underenumeration Rate, by sex and labour force status(a)

Labour force status	Males %	Females %	Persons %
Employee	5.1	4.3	4.7
Employer	8.1	6.1	7.4
Own account worker	4.1	2.8	3.7
Contributing family worker	4.7	3.2	3.8
Unemployed looking for full-time work	11.1	8.2	10.1
Unemployed looking for part-time work	7.7	6.5	7.0
Not in the labour force	5.1	4.4	4.7
Not stated	13.3	8.8	10.9
<b>TOTAL</b>	<b>5.4</b>	<b>4.5</b>	<b>5.0</b>

(a) This Labour Force Status classification (LFSP) was used in the 2001 Census. Following the release of Census Dictionary, 2006 in May 2006, this Classification was changed to LFS06P (see Census Dictionary: Corrigendum (cat. no. 2901.0)). As the CDE Project data was linked and analysed before the changed classification was available, the LFSP classification is used here. For definitions of each category, see the Glossary.

### Other characteristics of persons missed in LFS

Compared to the overall underenumeration rate of 5.0%, relative to Census, there were several other characteristics (that is, types of people, dwellings or geographies) identified as being associated with high underenumeration. They are presented in the following table.

### 6. LFS underenumeration rate, Other characteristics

Characteristic	Missed in LFS No.	Enumerated in both LFS and Census No.	Underenumeration rate %
----------------	----------------------	--	----------------------------

Living elsewhere in Australia in 2005(a)	553	5 627	9.0
Living overseas in 2005	87	612	12.5
Living overseas in 2001	179	2 106	7.8
Living in a single person household	361	5 211	6.5
Living in a household of 6 or more persons	402	3 240	11.0
Aboriginal or Torres Strait Islander	82	724	10.2
Living in remote/very remote areas	46	514	8.2
Speak a language other than English at home	523	8 512	6.1

(a) Living somewhere other than person's usual address in the 2006 Census.

## CONCLUSION

The results of the CDE Quality Study of LFS Underenumeration provided a measure of LFS underenumeration when compared with the Census (5.0%) and identified some characteristics of those who were enumerated in the Census but missed in the LFS. As a consequence of this study, the ABS will review the field operations which apply to the groups with high underenumeration rates relative to the Census. Due to the limitations of the study, including the linkage rate between Census and LFS addresses, the findings will not be used to minimise the impact of undercoverage bias on LFS estimates through weighting adjustments. However, a beneficial outcome of this CDE quality study is that the ABS has identified the potential to improve the linkage rate in future studies through the way that address details are recorded in the LFS and Census.

## Spotlight – Employment Type (Feature Article)

This article was published in the July 2008 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

### EMPLOYMENT TYPE

#### INTRODUCTION

The nature of employment in Australia has been changing since the early 1990s. The increase in part-time and 'casual' employment has been of particular interest. Also of interest are the number of employees entitled to paid leave, and the extent of self-employment.

The ABS has developed an annual time series on the types of employment that people have. These include estimates of employees who are not entitled to paid sick leave, paid holiday leave or both (used as one measure of 'casual' employees), and people who operate their own business. The series are derived by combining data from the Labour Force Survey (LFS) and the Survey of **Employee Earnings, Benefits and Trade Union Membership** (cat. no. 6310.0), conducted as a supplement to the August LFS each year. The time series covers data from August 1992 to August 2007. The updated Employment Type spreadsheet is available from the **Australian Labour Market Statistics** (cat. no. 6105.0) publication on the ABS website.

The October 2004 issue of **Australian Labour Market Statistics** (cat. no. 6105.0) presents an article 'Changes in types of employment' that discusses the classification and methodology used to construct the time series. More detail can be found in an appendix to the October 2004 article, available from the ABS website. This spotlight presents an update of the time series to August 2007 ([end note 1](#)).

To allow comparison over time, the occupation and industry classifications referred to in this article, and those contained in the Employment Type spreadsheet, are from the **Australian Standard Classification of Occupation (ASCO), 1997 (Second Edition)**, and the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993**.

### EMPLOYMENT TYPE

The series presented in this article and in the spreadsheet are for the following types of employment in main job (unless otherwise stated):

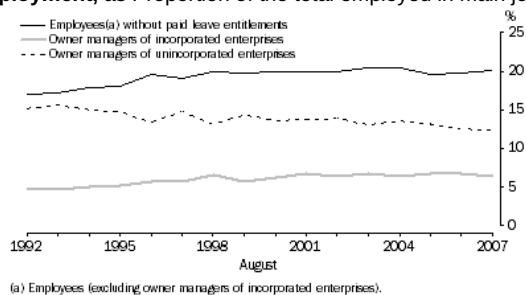
- employees (excluding owner managers of incorporated enterprises)
  - employees (**end note 2**) with paid leave entitlements
  - employees (**end note 2**) without paid leave entitlements
- owner managers (**end note 3**)
  - owner managers of incorporated enterprises (OMIEs) (**end note 4**)
  - owner managers of unincorporated enterprises (OMUEs) (**end note 5**)

### CHANGES IN TYPES OF EMPLOYMENT

Employees (**end note 2**) represented 81% of all employed people in August 2007 compared to 79% in 1992. The most common type of employment in main job continues to be that of an employee (**end note 2**) entitled to paid sick or holiday leave or both, with a 61% share of employment in August 2007. While the proportion of employees (**end note 2**) with paid leave entitlements declined slightly from 1992 to 1997 (62% to 60%), there has been little change since this period. In August 2007, employees (**end note 2**) without paid leave entitlements accounted for 20% of all employed people. This proportion rose from 17% in 1992 to 20% in 1998 and has remained relatively stable since then as shown in Graph 1.

Owner managers made up 19% of the employed population in August 2007 compared with 20% in 1992. Graph 1 shows that owner managers of unincorporated enterprises accounted for 12% of all employed people in August 2007, while owner managers of incorporated enterprises represented 6%. In August 1992, the proportion of owner managers of unincorporated enterprises (15%) was three times that of owner managers of incorporated enterprises (5%).

### 1. Types of employment, as Proportion of the total employed in main job - 1992 to 2007



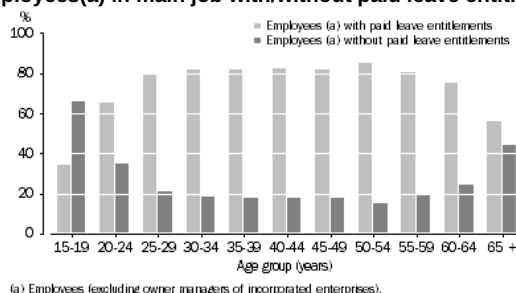
Women represented 45% of all employed people in August 2007 compared to 43% in 1992. In August 2007, 25% of employed women (26% in 1992) were employees (**end note 2**) without paid leave entitlements compared to 16% of employed men (11% in 1992). The higher proportion of female employees (**end note 2**) without paid leave entitlements is associated with the fact that women are more likely to be in part-time work than men and that part-time workers (**end note 6**) are more likely to be employees (**end note 2**) without paid leave entitlements. The gap in the proportion of female and male employees (**end note 2**) who are without paid leave entitlements has decreased from 15% in 1992 to 9% in 2007. This decrease is associated with the fact that more men are participating in part-time employment than in previous years (11% in 1992 and 15% in 2007).

Owner managers are more often men than women. In August 2007, 23% of employed men were owner managers, compared to 13% of employed women. These proportions have not changed greatly since 1992 (24% and 14% respectively). In August 2007, almost two-third of male owner managers (65%) were owner managers of unincorporated enterprises.

### AGE

In August 2007, people in the younger age groups (15-19 years and 20-24 years), and in the oldest age group (65 years and over), were more likely to be working as an employee (**end note 2**) without paid leave entitlements. Two-thirds (66%) of employees (**end note 2**) aged 15-19 years were without paid leave entitlements, as were 35% of employees (**end note 2**) aged 20-24 years. This is associated with the fact that young people are more likely to work in part-time jobs and combine these jobs with study. Of employees (**end note 2**) aged 65 years and over, 44% did not have paid leave entitlements. This is associated with the fact that many older people tend to move into part-time jobs as a transition to retirement.

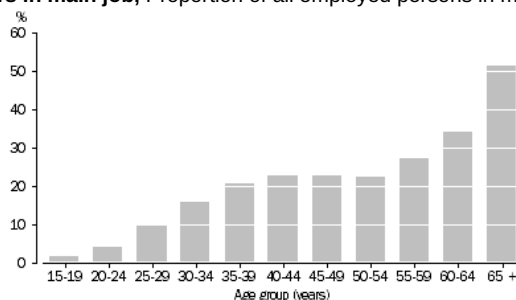
### 2. Proportion of employees(a) in main job with/without paid leave entitlements, by Age group



Most employees (**end note 2**) between the ages of 20 and 59 years had paid leave entitlements. In August 2007, the highest proportion of employees (**end note 2**) who had paid leave entitlements was for those aged 50-54 years (85%).

Graph 3 shows that the likelihood of being an owner manager (either of an incorporated or an unincorporated enterprise) increases with age, especially for those people aged 55 years and over. Only 2% of employed people aged 15-19 years were owner managers. In contrast, just over half (51%) of employed people aged 65 and over were owner managers. Owner managers of unincorporated enterprises accounted for 37% of all employed people aged 65 years and over. About 14% of the total employed in this age group were owner managers of incorporated enterprises.

### 3. Owner managers in main job, Proportion of all employed persons in main job-by Age group



## FULL-TIME/PART-TIME

Overall, full-time employed people (in all jobs) represented 71% of the total employed in August 2007, compared to 75% in 1992. Conversely, the proportion of part-time employed persons in all jobs rose from 25% to 29% over the same period.

The most common type of employment in August 2007 was that of a full-time employee (**end note 2**) with paid leave entitlements, accounting for 51% of the total employed, down from 56% in 1992. Owner managers of unincorporated enterprises accounted for 8% of all employed people in 2007, compared to 11% in 1992.

### 4. Employed Persons, Type of employment in main job - by full-time/part-time status in all jobs - 1992 and 2007

	PROPORTION OF EMPLOYED			Total '000	Proportion employed part-time %
	Full-time %	Part-time %	Total %		
<b>1992</b>					
Employees* with paid leave entitlements	55.6	6.5	62.0	4 738.3	10.4
Employees* without paid leave entitlements	4.2	12.8	16.9	1 294.3	75.3
Owner managers of incorporated enterprises	4.0	0.8	4.9	372.2	17.4
Owner managers of unincorporated enterprises	11.2	3.9	15.2	1 157.0	25.8
<b>Total(a)</b>	<b>75.3</b>	<b>24.7</b>	<b>100.0</b>	<b>7 636.7</b>	<b>24.7</b>
<b>2007</b>					
Employees* with paid leave entitlements	51.0	10.0	61.0	6 360.9	16.4
Employees* without paid leave entitlements	6.7	13.4	20.1	2 096.0	66.6
Owner managers of incorporated enterprises	5.1	1.3	6.3	660.2	19.9
Owner managers of unincorporated enterprises	8.5	3.9	12.4	1 291.4	31.4
<b>Total(a)</b>	<b>71.3</b>	<b>28.7</b>	<b>100.0</b>	<b>10 435.8</b>	<b>28.7</b>

(a) Total includes 'Contributing family workers'.

\* Employees (excluding owner managers of incorporated enterprises).

In August 2007, two thirds (67%) of employees (**end note 2**) without paid leave entitlements were employed part-time, down from 75% in 1992. For all other employment type categories, the proportion of people employed part-time has increased. The proportion of employees (**end note 2**) with paid leave entitlements who worked part-time increased from 10% of all employed people in 1992 to 16% in 2007.

## OCCUPATION

Data on occupation and employment type are available from 1996 onwards. In 2007, about 72% of employees (**end note 2**) without paid leave entitlements were in the two lowest skills occupations, that is, skill levels 4 and 5. Skill level 4 consists of Intermediate clerical, sales and service workers, and Intermediate production and transport workers. Skill level 5 consists of Elementary clerical, sales and service workers, and Labourers and related workers.

### 5. Employees in main job without paid leave entitlements(a), by skill level(b)

Occupation(b)	1996 '000	%	2007 '000	%	Difference '000	% change
Skill level 1	167.7	10.3	243.9	11.6	76.1	45.4
Skill level 2	67.1	4.1	128.7	6.1	61.6	91.9
Skill level 3	192.4	11.8	209.3	10.0	16.9	8.8
Skill level 4	476.8	29.3	673.2	32.1	196.4	41.2
Skill level 5	722.6	44.4	841.0	40.1	118.4	16.4
<b>Total</b>	<b>1 626.6</b>	<b>100.0</b>	<b>2 096.0</b>	<b>100.0</b>	<b>469.4</b>	<b>28.9</b>

(a) Employees (excluding owner managers of incorporated enterprises)

(b) For more detail on skill level see the **Australian Standard Classification of Occupation, Second Edition** (cat no. 1220.0).

The proportion of employees (**end note 2**) who were without paid leave entitlements increased in Skill levels 1, 2 and 4 between 1992 and 2007. The largest percentage increase (92%) in employees (**end note 2**) without paid leave entitlements occurred in skill level 2 (Associate professionals), albeit from a small base.

In August 2007, more than a third of owner managers had an occupation equivalent to skill level 1 (36%). Almost two thirds of owner managers of incorporated enterprises were in skill levels 1 and 2 (64%). This has been a consistent pattern in employment type since 1996. Owner managers of unincorporated enterprises tend to be concentrated in skill levels 1 (33%) and 3 (27%).

### 6. Owner managers in main job, by skill level(a)

Occupation	OMIEs '000	%	OMUEs '000	%	Total owner managers '000	%
Skill level 1	286.2	43.4	421.4	32.6	707.6	36.3
Skill level 2	138.2	20.9	199.3	15.4	337.5	17.3
Skill level 3	126.9	19.2	348.9	27.0	475.9	24.4
Skill level 4	71.3	10.8	174.5	13.5	245.7	12.6
Skill level 5	37.6	5.7	147.3	11.4	184.9	9.5
<b>Total</b>	<b>660.2</b>	<b>100.0</b>	<b>1 291.4</b>	<b>100.0</b>	<b>1 951.5</b>	<b>100.0</b>

(a) For more detail on skill level see the **Australian Standard Classification of Occupation, Second Edition** (cat. no. 1220.0).

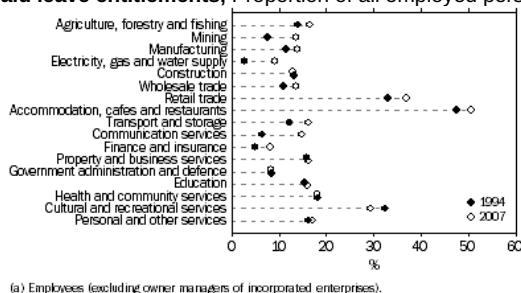
## INDUSTRY

Data on industry and employment type are available from 1994 onwards. The proportion of all employed people who are employees (**end**

**note 2)** with paid leave entitlements was highest in the Government administration and defence (91%) and the Electricity, gas and water supply (88%) industries.

In August 2007, employees (**end note 2**) without paid leave entitlements represented 50% of all those employed in the Accommodation, cafes and restaurants industry, followed by Retail trade (37%), and the Cultural and recreational services industry (29%). These industries have high proportions of people who work part-time (at least 41%).

#### 7. Employees(a) in main job without paid leave entitlements, Proportion of all employed persons in main job, by Industry-1994 to 2007



There was little increase in the proportion of employees (**end note 2**) without paid leave entitlements across most industries from 1994 to 2007, with numbers decreasing in some industries (Cultural and recreational services dropped from 32% to 29%). The highest increase occurred in the Communication services industry (from 6% to 15%), followed by the Electricity, gas and water supply industry (from 3% to 9%) over the period.

#### 8. Owner managers in main job, as Proportion of all employed in main job, by Industry

Industry	OMIES		OMUES		Total owner managers		Total employed	
	'000	%	'000	%	'000	%	'000	%
Agriculture, forestry and fishing	45.2	12.7	186.3	52.4	231.5	65.1	355.7	100.0
Mining	*2.5	*1.8	*1.5	*1.1	*4.0	*2.9	136.4	100.0
Manufacturing	56.9	5.3	72.2	6.7	129.0	12.0	1 075.4	100.0
Electricity, gas and water supply	*1.4	*1.6	*1.0	*1.2	*2.4	*2.8	84.2	100.0
Construction	112.9	12.3	269.7	29.5	382.6	41.8	915.0	100.0
Wholesale trade	44.5	10.0	33.8	7.6	78.3	17.6	445.8	100.0
Retail trade	85.9	5.6	174.1	11.3	260.0	16.9	1 542.5	100.0
Accommodation, cafes and restaurants	30.0	5.9	37.9	7.5	67.9	13.4	507.2	100.0
Transport and storage	30.1	6.0	63.2	12.7	93.4	18.7	499.2	100.0
Communication services	9.3	5.1	18.3	10.0	27.6	15.1	182.5	100.0
Finance and insurance	27.9	7.1	17.6	4.4	45.5	11.5	395.9	100.0
Property and business services	143.1	11.1	199.8	15.5	342.9	26.6	1 287.6	100.0
Government administration and defence	*1.0	*0.2	*3.0	*0.6	*4.0	*0.8	483.4	100.0
Education	7.5	1.0	25.5	3.4	33.0	4.4	755.3	100.0
Health and community services	37.8	3.5	58.1	5.4	95.9	8.8	1 084.1	100.0
Cultural and recreational services	11.6	4.0	55.8	19.1	67.4	23.1	292.3	100.0
Personal and other services	12.7	3.2	73.5	18.7	86.2	21.9	393.2	100.0
<b>Total</b>	<b>660.2</b>	<b>6.3</b>	<b>1 291.4</b>	<b>12.4</b>	<b>1 951.5</b>	<b>18.7</b>	<b>10 435.8</b>	<b>100.0</b>

\* estimate is subject to sampling variability too high for most practical purposes

Overall, owner managers represented 19% of the employed population in August 2007 (see Table 8). However, in certain industries, owner managers represented a large proportion of those employed. They represented almost two thirds of the employed population in Agriculture, forestry and fishing (65%), and 42% of those employed in the Construction industry.

Agriculture, forestry and fishing had the highest proportion of owner managers of unincorporated enterprises (52%), followed by Construction (30%). Males made up at least two-thirds (68%) of owner managers of unincorporated enterprises in the Agriculture, forestry and fishing industry.

The industry with the highest proportion of owner managers of incorporated enterprises was Agriculture, forestry and fishing (13% of all employed in that industry) and this was closely followed by Construction (12%).

#### FURTHER INFORMATION

An updated spreadsheet containing the annual time series on employment type from 1992 to 2007, is now available from the ABS website. To find the spreadsheet go to <<https://www.abs.gov.au>>[Statistics-By Catalogue Number-6. Labour statistics and Prices-61.Labour Statistics - general-6105.0 - **Australian Labour Market Statistics**]. This spreadsheet includes estimates of employment type by sex and full-time/part-time status for each of the following variables: age (five year age groups), state of usual residence, industry and occupation.

#### END NOTES

1. An improved method of estimation for the Labour Force Survey (LFS) has been introduced in April 2007. This new method, known as composite estimation, is more efficient than the previous estimation method. That is, the composite estimator achieves a given level of standard error at lower cost and respondent load than the previous estimator. The ABS has revised all of the statistics in the Labour Force publication and associated spreadsheets back to April 2001 based on the new estimation method. This includes the Employment Type spreadsheet, which has been updated from August 2001 with the new estimation method. For more information on composite estimation,

please refer to **Information Paper: Forthcoming Changes to Labour Force Statistics** (cat. no. 6292.0).

2. Employees (excluding owner managers of incorporated enterprises).

3. Owner managers are people who work in their own business, with or without employees, whether or not the business is of limited liability

4. Owner managers of incorporated enterprises are people who work in their own incorporated enterprise, that is, a business entity that is registered as a separate legal entity to its members or owners (also known as a limited liability company). They are technically employees, however, they are similar in characteristics to owner managers of unincorporated enterprises.

5. Owner managers of unincorporated enterprises are people who operate their own unincorporated enterprise, that is, a business entity i.e. sole proprietor or partnership in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred. Includes those engaged independently in a trade or profession.

6. Part-time workers are employed people who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

7. Skill level classifications have been taken from the **Australian Standard Classification of Occupations, Second Edition** (cat. no. 1220.0). Below is the division of each occupation into a skill level.

- Skill level 1:
  - Managers and Administrators
  - Professionals
- Skill level 2:
  - Associate Professionals
- Skill level 3:
  - Tradepersons and Related Workers
  - Advanced Clerical and Service Worker
- Skill level 4:
  - Advanced Clerical, Sales and Service Workers
  - Intermediate Production and Transport Workers
- Skill level 5:
  - Elementary Clerical, Sales and Service Workers
  - Labourers and Related Workers

## Spotlight – Maternity Leave (Feature Article)

This article was published in the July 2008 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

### MATERNITY LEAVE

#### INTRODUCTION

The issue of paid maternity leave has achieved increasing prominence in Australia over the past few years, particularly within the context of an ageing population and initiatives to increase the fertility rate in Australia; the ability of Australian families to balance their work and family responsibilities; and concerns over the costs and availability of child care. There has been ongoing debate about whether there should be a paid maternity leave scheme, and if so, who would fund such a scheme.

In response to this, the Productivity Commission has been asked by the current Government to undertake an investigation into paid maternity, paternity and parental leave to "examine ways the Government can provide improved support to parents with newborn children".

In looking at what impact the introduction of a national maternity leave scheme may have, it is important to consider the existing coverage of paid maternity leave. While Australia may be one of only two OECD countries that do not have a government funded maternity leave scheme, many Australian women do have paid maternity leave provided by their employer.

Information on employees (**end note 1**) entitlements to paid maternity (or paternity) leave (in their main job) is collected by the Australian Bureau of Statistics (ABS) in the Employee Earnings, Benefits and Trade Union Membership (EEBTUM) Survey and the Forms of Employment Survey (FOES).

These surveys are run as annual supplements to the monthly ABS Labour Force Survey (LFS), with EEBTUM conducted in August and FOES conducted in November (the latter on an annual basis since November 2006). Results are released in **Employee Earnings, Benefits and Trade Union Membership, Australia** (cat. no. 6310.0) and **Forms of Employment, Australia** (cat. no. 6359.0) respectively.

Information on women's use of paid or unpaid maternity leave is collected in the Pregnancy and Employment Transitions survey (also run as a supplement to the monthly LFS). This survey was last conducted in November 2005, with results released in **Pregnancy and Employment Transitions, Australia** (cat. no. 4913.0).

This article highlights changes in paid maternity leave coverage over the past five years, and explores some of the characteristics of female employees (**end note 1**) who have paid maternity leave entitlements. The majority of data for this article is sourced from the August 2007

EEBTUM survey, as there is a longer time series available from this source (i.e. 2002 to 2007), and it also collects a number of characteristics that are useful in the context of analysing maternity leave entitlements, such as weekly earnings and sector of employment.

## OVERVIEW

In August 2007, it was estimated that 45% (1.8 million) of the 4 million female employees (**end note 1**) were entitled to paid maternity leave in their main job (ie the job in which they work the most hours). Paid maternity leave entitlements were twice as prevalent for those working full-time, with 60% of full-time female employees (**end note 1**) having paid maternity leave entitlements compared with 27% of part-time female employees (**end note 1**). As a result, almost three-quarters (72%) of all female employees (**end note 1**) with paid maternity leave entitlements worked full-time.

In contrast, it was estimated that 1.5 million (39%) female employees (**end note 1**) were not entitled to paid maternity leave, with part-time employees (**end note 1**) accounting for 70% of this figure.

### 1. Female employees(a), Whether entitled to paid maternity leave - Aug 2007

	Full-time '000	%	Part-time '000	%	Total '000	%
Entitled to paid maternity leave	1 299.3	60.1	501.0	27.3	1 800.3	45.0
Not entitled to paid maternity leave	461.0	21.3	1 081.8	58.9	1 542.8	38.6
Did not know	402.4	18.6	253.6	13.8	656.1	16.4
<b>Total</b>	<b>2 162.7</b>	<b>100.0</b>	<b>1 836.4</b>	<b>100.0</b>	<b>3 999.1</b>	<b>100.0</b>

(a) Employees (excluding Owner Managers of Incorporated Enterprises).  
ABS Survey of Employee Earnings, Benefits and Trade Union Membership.

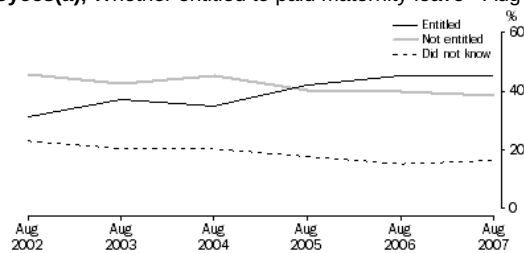
It is important to note that for some 650,000 (16%) female employees (**end note 1**), it was not possible to establish whether they had paid maternity leave entitlements (i.e. did not know), and this needs to be factored into any analysis of data on paid maternity leave entitlements.

The high proportion of 'Did not know' responses can largely be attributed to the Any Responsible Adult (ARA) methodology used in the LFS and supplementary surveys. Under this methodology, one member of the household answers on behalf of all members of that household. As a result, in some instances the person responding to the survey may not be aware of the various entitlements of other members of that household. Another contributing factor is that some people may not actually be aware of their own entitlements until such time as they are directly relevant to them.

Analysis of the 'Did not know' group does not highlight any significant disproportionate distribution across the range of demographic and labour market characteristics. For example, when looking at 'Did not know' responses by age, while there was a slight dip for female employees (**end note 1**) in their thirties, overall the proportion of female employees in the 'Did not know' group remains relatively consistent across the ages (generally between 10% to 20%). Therefore, it seems likely that the 'Did not know' responses would be spread proportionally across the 'Entitled' and 'Not entitled' groups.

Between August 2002 and August 2007, the proportion of female employees (**end note 1**) entitled to paid maternity leave increased from 31% to 45% (Graph 2). This represents an additional 700,000 female employees (**end note 1**) with paid maternity leave entitlements. The proportion of female employees (**end note 1**) without paid maternity leave entitlements decreased over this period, as did the proportion of female employees (**end note 1**) for whom it was not possible to establish whether they had paid maternity leave entitlements.

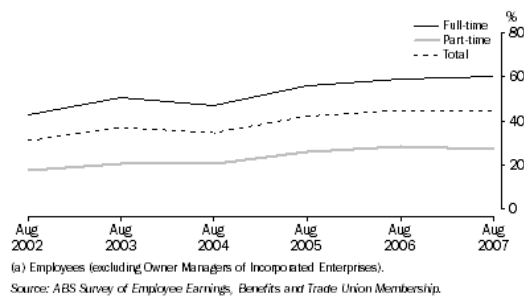
### 2. Female employees(a), Whether entitled to paid maternity leave - Aug 2002 to Aug 2007



(a) Employees (excluding Owner Managers of Incorporated Enterprises).  
Source: ABS Survey of Employee Earnings, Benefits and Trade Union Membership.

Over the 5 year period to August 2007, the proportion of full-time female employees (**end note 1**) who were entitled to paid maternity leave increased from 43% to 60%, while for part-time female employees (**end note 1**) the corresponding increase was from 18% to 27% (Graph 3).

### 3. Female employees(a) entitled to paid maternity leave, by Full-time or Part-time status - Aug 2002 to Aug 2007



The remainder of this article focuses on the characteristics of those female employees (**end note 1**) who had paid maternity leave entitlements.

## AGE

Paid maternity leave entitlements vary across the life cycle. Graph 4 shows that there is a sharp increase in paid maternity leave entitlements for female employees (**end note 1**) between 15 years of age and the late-twenties, and a marked decrease from the early-fifties into the older ages. However, for female employees (**end note 1**) between these two age groups, paid maternity leave entitlements remain fairly consistent, albeit with some variability (within a range of 46% to 56% in 2007).

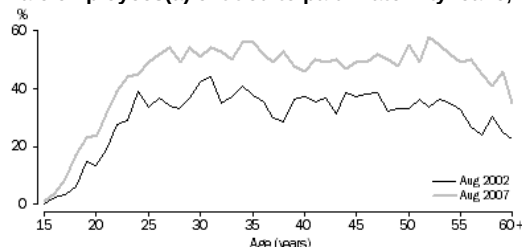
The lower incidence of paid maternity leave entitlements in the younger and older age groups reflects the high incidence of part-time employment in these age groups. For example, in August 2007, 55% of female employees (**end note 1**) aged 15 to 24 years and 57% of female employees (**end note 1**) aged over 60 years were employed part-time (in their main job). In contrast, just 43% of female employees (**end note 1**) aged 25 to 59 years were employed part-time (in their main job).

In August 2007, the incidence of female employees (**end note 1**) with paid maternity leave entitlements was generally higher for those female employees (**end note 1**) aged from their late-twenties to their mid-thirties, although there was also a peak for female employees (**end note 1**) in their early-fifties. For full-time female employees (**end note 1**), the peak was within this same age range, while for part-time employees (**end note 1**), the peak occurred slightly later (mid to late-thirties).

In comparison, the median age of all mothers who gave birth (in 2006) was 31 years (**Births, Australia, 2006** (cat. no. 3301.0)).

Between August 2002 and August 2007, the incidence of female employees (**end note 1**) with paid maternity leave entitlements increased across all ages, although the increases were greater for those aged over 25 years of age.

**4. Female employees(a) entitled to paid maternity leave, by Age**



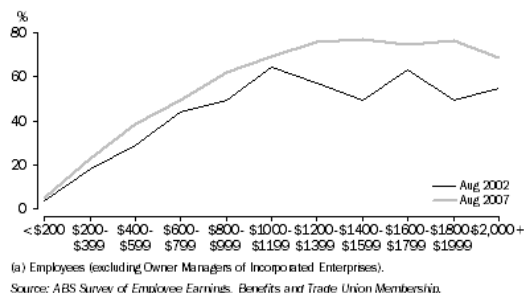
## WEEKLY EARNINGS

There is a high correlation between earnings and the entitlement to paid maternity leave. The mean weekly earnings (in main job) of female employees (**end note 1**) who were entitled to paid maternity leave was \$908, compared with \$487 for female employees (**end note 1**) without paid maternity leave entitlements. This large difference reflects, in part, the large numbers of part-time employees (**end note 1**) without paid maternity leave entitlements. When focussing on full-time female employees (**end note 1**) only, the difference in mean weekly earnings between those female employees (**end note 1**) with and without paid maternity leave entitlements was much lower (\$1,036 compared with \$878).

Looking at the earnings distribution, the proportion of female employees (**end note 1**) entitled to paid maternity leave increases as earnings increase, before flattening out once earnings exceed around \$1,200 per week. In August 2007, female employees (**end note 1**) who earned between \$1,400 and \$1,600 per week had the highest incidence of paid maternity leave entitlements (77%). For full-time female employees (**end note 1**) the peak was in the \$1,800 to \$2,000 per week range (79%), while for part-time employees (**end note 1**) the peak was in the \$1,000 to \$1,200 per week range (64%).

Between August 2002 and August 2007, increases in paid maternity leave entitlements were concentrated among the higher earners, with only small increases in paid maternity leave entitlements for female employees (**end note 1**) earnings under \$1,000 per week.

**5. Female employees(a) entitled to paid maternity leave, by Mean Weekly Earnings in main job**



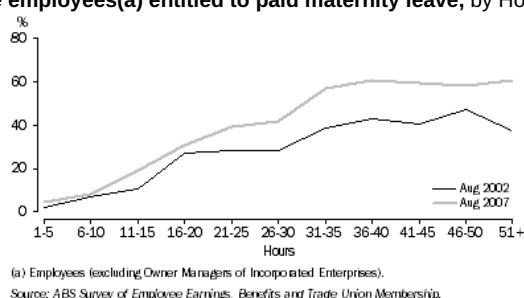
## HOURS PAID FOR

While there was a considerable disparity in paid maternity leave entitlements between full-time and part-time female employees (**end note 1**) (60% compared with 27%), looking at paid maternity leave entitlements according to the number of weekly hours paid for provides another perspective.

Graph 6 shows that in August 2007, and to a lesser extent August 2002, there does not appear to be a clear delineation in the incidence of paid maternity leave entitlements between full-time and part-time female employees (**end note 1**) (ie those who work 35 hours or more, or less than 35 hours).

In August 2007, there was a fairly consistent increase in paid maternity leave entitlements as weekly hours increased up to 26-30 hours per week, followed by a sharp increase between those working 26-30 hours and 31-35 hours. However for those female employees (**end note 1**) working over 31 hours, the incidence of paid maternity leave entitlements remains fairly steady as hours increases.

6. Female employees(a) entitled to paid maternity leave, by Hours paid for

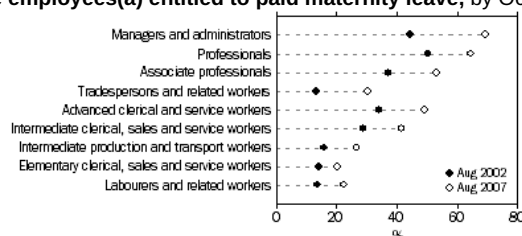


## OCCUPATION

Paid maternity leave entitlements are considerably more prevalent in the higher skilled occupations than the lower skilled occupations. In August 2007, the occupation group with the highest proportion of female employees (**end note 1**) with paid maternity leave entitlements was Managers and administrators (69%), while the lowest was Elementary clerical, sales and service workers (20%). The low level of paid leave entitlements in the Elementary clerical, sales and service workers (and Labourers and related workers) occupation group reflects the relatively high concentration part-time and lower-paid employees (**end note 1**) in these occupation groups.

Between August 2002 and August 2007, the Managers and administrators occupation group had the largest percentage point increase in the incidence of paid maternity leave entitlements (from 44% to 69%), while the Elementary clerical, sales and service workers group had the smallest increase (from 14% to 20%).

7. Female employees(a) entitled to paid maternity leave, by Occupation(b)

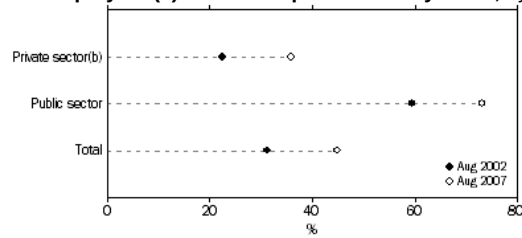


## SECTOR AND INDUSTRY

Paid maternity leave entitlements are much more prevalent in the public sector than the private sector, with 73% of female public sector employees (**end note 1**) having paid maternity leave entitlements compared with 36% of female private sector employees (**end note 1**).

However, between August 2002 and August 2007, there was a much greater proportional increase for the private sector than the public sector, albeit from a much lower base. The proportion of female employees (**end note 1**) with paid maternity leave entitlements in the private sector increased by almost two-thirds compared with an increase of less than one-quarter for the public sector.

#### 8. Female employees(a) entitled to paid maternity leave, by Sector



(a) Employees (excluding Owner Managers of Incorporated Enterprises).

(b) Includes employees for whom sector could not be determined.

Source: ABS Survey of Employee Earnings, Benefits and Trade Union Membership.

Graph 9 shows the proportion of female employees (**end note 1**) with paid maternity leave entitlements for a range of selected industries (the industries which had the highest numbers of female employees (**end note 1**) at August 2007). Of the selected industries, Government administration and defence (81%), Finance and insurance (67%) and Education (65%) had the highest proportion of females employees (**end note 1**) with paid maternity leave entitlements. The high level of paid maternity leave entitlements within the Government administration and defence and Education industries reflects the large contribution the public sector makes to these industries.

The industries with the lowest proportion of female employees (**end note 1**) with paid maternity leave entitlements were Accommodation, cafes and restaurants (14%) and Retail trade (21%). These industries have a high concentration of part-time and lower-paid employees.

Between August 2002 and August 2007, the largest increases (in percentage and percentage point terms) occurred in the Manufacturing, Finance and insurance, Property and business services and Wholesale trade industries. The Health and community services industry experienced the largest increase in the number of female employees (**end note 1**) with paid maternity leave entitlements (166,000) over the same period.

#### 9. Female employees(a) entitled to paid maternity leave, by Selected Industries(b)



(a) Employees (excluding Owner Managers of Incorporated Enterprises).

(b) Classified according to the Australian and New Zealand Standard Industrial Classification, 1993.

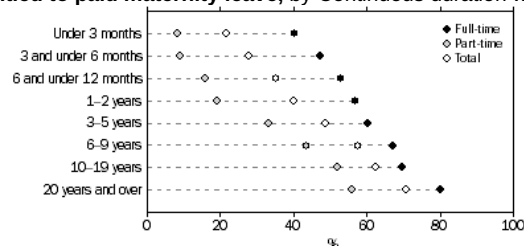
Source: ABS Survey of Employee Earnings, Benefits and Trade Union Membership.

#### DURATION WITH EMPLOYER

There is a high correlation between the length of time a person works for an employer and the entitlement to paid maternity leave. This is the case for both full-time and part-time employees (**end note 1**).

Graph 10 shows that just 22% of female employees (**end note 1**) who had worked for their current employer for under 3 months had paid maternity leave entitlements, compared with 71% of female employees (**end note 1**) who had worked for their current employer for 20 years or more.

#### 10. Female employees(a) entitled to paid maternity leave, by Continuous duration with current employer - Nov 2007

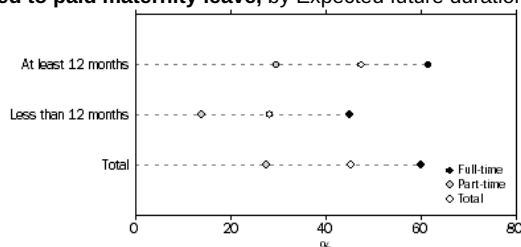


(a) Employees (excluding Owner Managers of Incorporated Enterprises).

Source: ABS Forms of Employment Survey.

This relationship can also be seen when looking at the length of time a person expects to be working for their current employer. Over 60% of full-time female employees (**end note 1**) who expect to be with their current employer for at least 12 months have an entitlement to paid maternity leave, compared with 45% of those who do not expect to be with their current employer in 12 months time (see Graph 11).

## 11. Female employees(a) entitled to paid maternity leave, by Expected future duration with current employer - Nov 2007



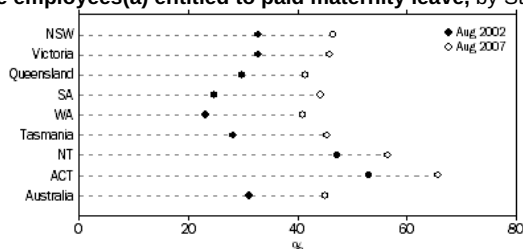
(a) Employees (excluding Owner Managers of Incorporated Enterprises).  
Source: ABS Forms of Employment Survey.

## STATES AND TERRITORIES

The state or territory with the highest proportion of female employees (**end note 1**) entitled to paid maternity leave was the ACT (66%), followed by the NT (57%). Female employees (**end note 1**) in Western Australia and Queensland had the lowest incidence of paid maternity leave entitlements (both 41%). Variations in paid maternity leave entitlements across the states and territories generally reflects differences in the composition of the labour market within each of the states or territories. For example, the high level of paid maternity leave entitlements in the ACT and the NT reflects the large proportion of public sector employees (**end note 1**) within these territories.

In the five years to August 2007, the largest percentage increases in the proportion of female employees (**end note 1**) entitled to paid maternity leave were in South Australia and Western Australia, while the lowest increases were in the NT and ACT.

## 12. Female employees(a) entitled to paid maternity leave, by State/Territory



(a) Employees (excluding Owner Managers of Incorporated Enterprises).  
Source: ABS Survey of Employee Earnings, Benefits and Trade Union Membership

## REGIONS

Overall, a higher proportion of employees (**end note 1**) in capital cities had an entitlement to maternity leave than those employees (**end note 1**) in the balance of state (46% compared with 43%). However, this difference was driven by differences in paid maternity leave entitlements for part-time employees (**end note 1**) (28% compared with 26%), as full-time employees (**end note 1**) in capital cities and balance of state had the same incidence of paid maternity leave entitlements (60%).

While for full-time employees (**end note 1**) there was no difference between capital cities and balance of state at the Australia level, looking at the individual states provides a different perspective. With the exception of NSW, the proportion of full-time employees (**end note 1**) with paid maternity leave entitlements in the state capitals was higher than the balance of their respective states. However, a higher proportion of full-time employees (**end note 1**) in the balance of NSW were entitled to paid maternity leave than those in Sydney (65% compared with 60%).

## FURTHER INFORMATION

For further information about paid maternity leave entitlements, or the Employee Earnings, Benefits and Trade Union Membership or Forms of Employment surveys, please contact Michael Gerrity on Canberra (02) 6252 5514 or email <m.gerrity@abs.gov.au>.

## END NOTES

1. Employees (excluding Owner Managers of Incorporated Enterprises).

## Spotlight – Underemployed Workers (Feature Article)

This article was published in the July 2008 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

## UNDEREMPLOYED WORKERS

## INTRODUCTION

The underemployment rate in Australia has remained relatively stable in recent years despite a period of strong economic growth and falling unemployment. In May 2008, there were an estimated 668,500 people who were underemployed in Australia, compared with 477,000 people who were unemployed.

Underemployed people are those who want more work than they currently have, and who are available to do more work. The ABS defines underemployed workers as:

- Part-time workers who wanted more hours and were available to start work with more hours, either in the reference week or within four weeks; and
- Full-time workers who worked less than 35 hours in the reference week for economic reasons (such as being stood down or insufficient work being available).

Of the 668,500 underemployed workers in May 2008, the majority (617,800 or 92%) were underemployed part-time workers. These underemployed workers (along with unemployed people) contributed to a quarterly labour force underutilisation rate of 10.3% for May 2008 (for further information on the quarterly labour force underutilisation rate see the '[Quarterly labour force underutilisation rate](#)' article in this issue).

Quarterly underemployment estimates have been collected from the Labour Force Survey (LFS) since February 2003. These LFS estimates provide an opportunity to further explore the circumstances of underemployed workers that are not available from the ABS Underemployed Workers Survey conducted annually (see further information section). This is because information on the underemployed by occupation and industry are available only from the LFS. This article will examine the incidence of underemployment by broad occupation and industry group.

## OCCUPATION

Underemployment tends to be concentrated in the lower skilled occupation groups. In May 2008, 16% of people employed as Elementary clerical, sales and service workers and 13% of those employed as Labourers and related workers were underemployed (see Table 1). This compares with an average of 6% for all employed people. People employed in higher skilled occupations such as Managers and administrators were much less likely to be underemployed (1% in May 2008).

The high rate of underemployment among those employed in lower skilled occupations in part reflects the fact that people in these occupations are more likely to be employed part time (part-time workers account for more than 90% of all underemployed workers). In May 2008, more than three in five (63%) Elementary clerical, sales and service workers, and around two in five (42%) Labourers and related workers were employed part time. This is much higher than the average proportion of people employed part time across all occupations (29%), and, in particular, among Managers and administrators (11%).

As women and young people are more likely than others to be employed part time, underemployment also tends to be higher among occupation groups with a high proportion of females and people aged 15-24 years. In May 2008, nearly two-thirds (65%) of people employed as Elementary clerical, sales and service workers were women, and almost half (44%) were aged 15-24 years.

### 1. Occupation by Underemployment - May Quarter 2008

Occupation(a)	Employed '000	Underemployed %	Proportion in each occupation		Aged 15-24 years %
			Employed part-time %	Female %	
Managers and administrators	930.2	1.2	11.4	29.3	2.7
Professionals	2 124.1	3.8	24.1	52.7	8.1
Associate professionals	1 330.5	2.6	18.1	43.4	9.7
Tradespersons and related workers	1 346.1	3.1	11.1	10.6	23.1
Advanced clerical and service workers	376.0	4.4	44.0	89.9	11.0
Intermediate clerical, sales and service workers	1 779.4	7.9	41.0	73.3	22.3
Intermediate production and transport workers	917.3	7.4	20.1	14.1	16.0
Elementary clerical, sales and service workers	965.0	15.8	63.4	64.6	43.8
Labourers and related workers	910.2	13.4	41.6	34.4	25.2
<b>All employed</b>	<b>10 678.7</b>	<b>6.3</b>	<b>28.8</b>	<b>45.1</b>	<b>17.6</b>

(a) Occupation is classified according to the Australian Standard Classification of Occupations, Second Edition (cat. no. 1220.0).

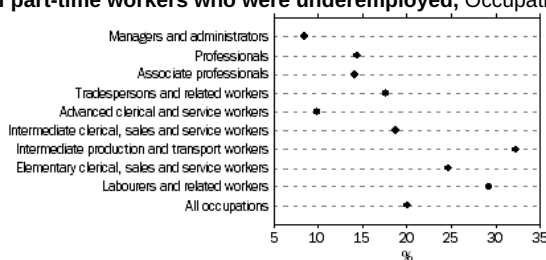
As noted in the introduction, the majority of underemployed workers are underemployed part-time workers. Another perspective on underemployment may be gained by looking at the incidence of underemployment among part-time workers across occupation and industry.

Overall, within the Intermediate production and transport workers occupation group a relatively small proportion of people were employed part-time (20% or 184,600 people) yet close to a third (32%) of these people were underemployed (see following graph). While among the Advanced clerical and service workers occupation group a larger proportion of people were employed part-time (44% or 165,300 people), yet just 10% of these part-time workers were underemployed. These examples may reflect the fact that while there are more female underemployed part-time workers than men (392,900 female underemployed part-time workers compared with 224,900 men in May 2008), the incidence of underemployment for men who work part-time is higher than for women (25% of men who worked part-time were underemployed compared with 18% for women). Therefore occupations that have a higher proportion of male part-time workers are more likely to have a higher incidence of underemployment among their part-time workers. Just over two-thirds (68%) of the people employed part-time as Intermediate production and transport workers in May 2008 were men, while nearly all of the people (97%) employed part-time as Advanced clerical and service workers were women.

Occupations that have a higher proportion of young part-time workers are also more likely to have a higher incidence of underemployment among their part-time workers. Nearly two-fifths (38%) of people employed part-time in the Intermediate production and transport workers

occupation group were aged 15-24 years compared to 6% in the Advanced clerical and service workers occupation group.

## 2. Proportion of part-time workers who were underemployed, Occupation(a) - May 2008



(a) Occupation is classified according to the Australian Standard Classification of Occupations, Second Edition (cat. no. 1220.0).

## INDUSTRY

The industries with the highest proportion of underemployed workers in May 2008, tended to be those in the services sector such as the Accommodation, cafes and restaurants (13%), Retail trade (11%) and Cultural and recreational services industries (11%). Underemployment was much less prevalent in the Finance and insurance industry (2%) and the Manufacturing industry (3%), as well as in the Government administration and defence industry (3%).

## 3. Industry by Underemployment - May Quarter 2008

Industry(a)	Employed '000	Underemployed %	Proportion in each industry		Aged 15-24 years %
			Employed part-time %	Female %	
Agriculture, forestry and fishing	376.2	3.5	24.1	30.3	9.2
Mining	165.3	*0.9	*3.0	16.8	11.7
Manufacturing	1 109.0	3.0	13.0	25.4	13.3
Electricity, gas and water supply	98.4	*0.1	*4.3	22.1	9.4
Construction	968.4	4.2	13.6	12.0	18.4
Wholesale trade	454.7	3.4	15.9	29.7	11.0
Retail trade	1 553.6	11.2	47.9	51.9	38.2
Accommodation, cafes and restaurants	521.8	13.2	49.2	56.7	35.5
Transport and storage	505.2	4.7	17.6	24.0	10.0
Communication services	186.8	4.6	16.9	30.8	14.5
Finance and insurance	400.9	1.5	18.8	54.9	12.0
Property and business services	1 255.6	5.7	26.3	46.2	13.6
Government administration and defence	474.5	3.3	19.5	55.0	9.0
Education	796.9	7.0	36.9	69.7	7.9
Health and community services	1 123.5	7.3	42.7	79.1	10.7
Cultural and recreational services	273.7	10.7	41.0	48.7	23.5
Personal and other services	414.2	6.6	29.8	48.8	17.0
<b>All employed</b>	<b>10 678.7</b>	<b>6.3</b>	<b>28.8</b>	<b>45.1</b>	<b>17.6</b>

\* estimate is subject to sampling variability too high for most practical purposes

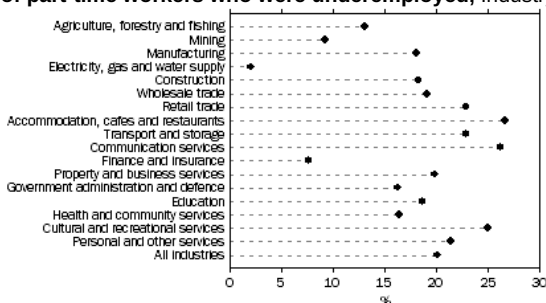
(a) Industry is classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993 (cat. no. 1292.0)

As with occupation, the industries in which underemployment is most prevalent tend to be those which have a high proportion of part-time workers, many of whom are employed in lower skilled occupations. The proportion of employed people working part time in the Accommodation, cafes and restaurants (49%), Retail trade (48%) and Cultural and recreational services (41%) was much higher than the average across all industries (29%).

The industries in which underemployment was high were also those with higher than average proportions of women and young people.

As with occupation, not all industries with a large proportion of part-time workers had a correspondingly high proportion of underemployed part-time workers. For instance, while in the Health and community services industry just over two-fifths (43%) of the workforce was employed part-time, the proportion of part-time workers who were underemployed was just 16%. In contrast, in the Communication services industry, 17% of the workforce was employed part-time yet 26% of these were underemployed possibly reflecting the relatively low proportion (11%) 15-24 year olds employed part-time in the Health and community services industry. Also, the proportion of those employed part-time in the Health and community services industry who were men was 10% compared with 39% for the Communication services industry.

## 4. Proportion of part-time workers who were underemployed, Industry(a) - May 2008



(a) Industry is classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993 (cat. no. 1292.0).

## FURTHER INFORMATION

Data on underemployed workers by industry and occupation from the LFS are available on request.

For alternative information on underemployed workers (for example, level of highest educational attainment, preferred number of extra hours, and main difficulty in finding work with more hours) see **Underemployed Workers, Australia** (cat. no. 6265.0).

For further information about this article, please contact Tracey Chester (ph (02) 6252 5609 or email <tracey.chester@abs.gov.au>).

## Spotlight – Volume Measures of Labour Underutilisation (Feature Article)

This article was published in the July 2008 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

### VOLUME MEASURES OF LABOUR UNDERUTILISATION

#### UPDATED VOLUME MEASURES OF LABOUR UNDERUTILISATION

The extent to which the labour supply is used is of interest from a number of perspectives. From a social perspective, there is concern that people whose aspirations for work are not being met may suffer financially, personally and socially. From an economic perspective, interest has focused on the amount of spare capacity in the labour supply and its potential to contribute to the production of goods and services.

Labour underutilisation can be measured in a number of ways - in either population or hours based estimates. ABS produces both types of measure. The population based or headcount measures give an indication of the proportion of the population affected by labour underutilisation. The hours based or volume measures are based on the hours of available labour that are unutilised and these measures may be more relevant for analysing the spare capacity of the labour force.

The annual experimental volume measures have now been updated for September 2007 and are presented in this article. Data for the annual headcount measures are presented in tables 4.1, 4.2 and 4.3 of this publication. In addition, a newly developed series, the quarterly labour force underutilisation rate (a more frequent headcount measure) is introduced in a separate article in this publication.

Three volume or hours based measures have been produced and are summarised in Table 1 below. For a more detailed explanation of these measures please see the article '**Labour Underutilisation**' in the July 2003 issue of **Australian Labour Market Statistics**.

#### 1. ABS experimental volume measures of labour force underutilisation(a)

Measure	Description
Volume unemployment rate	The hours of labour preferred by unemployed persons, as a percentage of the volume of potential labour in the labour force.
Volume underemployment rate	The additional hours of labour preferred by underemployed workers, as a percentage of the volume of potential labour in the labour force.
Volume labour force underutilisation rate	The total volume of underutilised labour in the labour force (hours preferred by those in unemployment, plus additional hours preferred by those in underemployment), as a percentage of the volume of potential labour in the labour force.

(a) The volume of potential labour in the labour force is equal to the hours of labour preferred by unemployed persons, plus the hours of labour preferred by underemployed workers (both utilised and unutilised), plus the hours of labour usually provided by employed persons who are not underemployed.

The volume of potential labour preferred by population groups contributing to the volume measures is shown in Table 2. In 2007, hours preferred by the unemployed continued to form the largest component of the volume labour force underutilisation rate, accounting for 63% of the volume of unutilised labour in the labour force in September 2007. For men, hours preferred by the unemployed formed more than two thirds (68%) of the male volume labour force underutilisation rate, compared to 59% for women. About 86% of unemployed men were looking for full-time work, compared to 68% of unemployed women.

#### 2. Volume measures of potential labour in the labour force, Number of weekly hours - September 2007

	Males '000 hours	Females '000 hours	Persons '000 hours
Unemployed persons (hours of work preferred)	7 366.0	5 957.2	13 323.2
Looking for full-time work	6 340.8	4 045.2	10 386.0
Looking for part-time work	1 025.2	1 912.0	2 937.3
Underemployed workers (additional hours of work preferred)	3 542.5	4 198.7	7 741.2
Underemployed full-time workers(a)	802.1	138.4	940.5
Underemployed part-time workers	2 740.4	4 060.3	6 800.7
Total volume of underutilised labour in the labour force	10 908.6	10 155.9	21 064.5
Employed persons (usual hours of work performed)(b)	239 374.7	148 249.1	387 623.8
Full-time workers	223 984.0	109 168.5	333 152.5
Part-time workers	15 390.7	39 080.6	54 471.3
Total volume of potential labour in the labour force(c)	250 283.3	158 405.0	408 688.2

(a) Full-time workers who worked less than 35 hours in the reference week for economic reasons (e.g. stood down, on short time or insufficient work).

(b) Actual hours worked in the reference week for underemployed full-time workers and usual hours worked for all other employed persons.

(c) Hours work preferred by unemployed persons, plus the total hours of work preferred by underemployed workers, plus the usual hours worked by employed persons who were not underemployed.

Labour Force Survey, September 2007; Job Search Experience, Australia, July 2007 (cat. no. 6222.0); Underemployed Workers, Australia, September 2007 (cat. no. 6265.0).

On average, unemployed people preferred 28.6 hours a week in September 2007, with men preferring 31.6 hours compared to 25.6 hours for women (see Table 3). Underemployed people are able to offer less additional hours because they are already working. On average underemployed people preferred an additional 14.9 hours of labour per week, with men again preferring more hours (16.9 hours) than women (13.5 hours).

### 3. Underutilised labour, Mean number of weekly hours preferred by selected groups - September 2007

	Males hours	Females hours	Persons hours
Unemployed persons (hours of work preferred)	31.6	25.6	28.6
Looking for full-time work	36.0	31.4	34.1
Looking for part-time work	18.1	18.4	18.3
Underemployed workers (additional hours of work preferred)	16.9	13.5	14.9
Underemployed full-time workers	21.5	12.6	19.4
Underemployed part-time workers	16.0	13.5	14.4

Labour Force Survey, September 2007; Job Search Experience, Australia, July 2007 (cat. no. 6222.0); Underemployed Workers, Australia, September 2007 (cat. no. 6265.0).

Table 4 compares the experimental volume measures of labour underutilisation with the corresponding headcount or population based measures that were updated in the April 2008 issue of 6105.0. For all three measures of labour underutilisation (i.e. unemployment, underemployment and labour force underutilisation), the experimental volume rates for September 2007 were lower than the corresponding headcount rates.

Unlike the headcount measures, the volume measures take into account the number of hours worked or preferred by individuals and this has the effect of weighting people according to the number of hours they either worked or preferred. If the hours preferred by the unemployed and the underemployed were as high as those worked by the employed, then the headcount and volume measures would be of the same magnitude. However, this is generally not the case. For example, the large difference between the headcount and volume underemployment rates (4.7% and 1.9%, respectively) reflects the large difference between the additional hours worked by the employed (36.5 hours a week) and those preferred by the underemployed (14.9 hours a week).

### 4. Measures of labour underutilisation, Selected headcount and volume measures - September 2007

	Males %	Females %	Persons %
Headcount measures			
Unemployment rate	3.8	4.6	4.2
Underemployment rate(a)	3.5	6.2	4.7
Labour force underutilisation rate(a)	7.3	10.8	8.9
Volume measures			
Volume unemployment rate	2.9	3.8	3.3
Volume underemployment rate	1.4	2.7	1.9
Volume labour force underutilisation rate	4.4	6.4	5.2

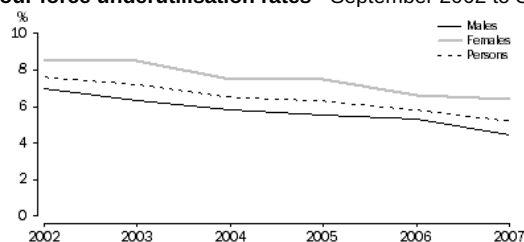
(a) To provide greater comparability with the volume measures, in this table data on the number of underemployed full-time workers are sourced from the Labour Force Survey rather than the Underemployed Workers Survey.

Labour Force Survey, September 2007; Job Search Experience, Australia, July 2007 (cat. no. 6222.0); Underemployed Workers, Australia, September 2007 (cat. no. 6265.0).

Graph 5 shows the steady decline in the experimental volume labour force underutilisation rate from 7.6% in September 2002 to 5.2% in September 2007. This is consistent with other measures, including the headcount measures of labour underutilisation, in suggesting a general tightening in the labour market over this period. While the volume labour force underutilisation rate has been consistently lower for men than for women over the five years to September 2007, the decline for men (from 7.0% to 4.4%) has been proportionally greater than that for women (from 8.6% to 6.4%) over the same period.

While there has been a slight fall in the volume underemployment rate between 2002 and 2007 (from 2.5% to 1.9%), most of the decline in the volume underutilisation rate can be attributed to the fall in the volume unemployment rate (from 5.2% to 3.3%).

### 5. Volume labour force underutilisation rates - September 2002 to September 2007



Sources: Labour Force Survey, September 2002 to September 2007; Job Search Experience, Australia, July 2002 to July 2007 (cat. no. 6222.0); Underemployed Workers, Australia, September 2002 to September 2007 (cat. no. 6265.0).

For further information on the concepts behind the volume measures, see the 'Experimental volume measures of labour underutilisation' article in the July 2003 issue of **Australian Labour Market Statistics** (cat. no. 6105.0).

For further information, please contact Scott Lee on Canberra (02) 6252 7635 or email [scott.lee@abs.gov.au](mailto:scott.lee@abs.gov.au).

# Explanatory Notes

## Explanatory Notes

### EXPLANATORY NOTES

#### INTRODUCTION

**1** [Australian Labour Market Statistics](#) brings together a range of ABS labour statistics to present a statistical summary of the Australian labour market. It has been developed primarily as a reference document, and provides a broad basis for labour analysis and research.

**2** In addition to data from the Labour Force Survey (LFS), this publication contains statistics from a range of other ABS labour surveys including Average Weekly Earnings, the Labour Price Index, Job Vacancies, Employment and Earnings - Public Sector, and Industrial Disputes. The publication also includes summary data from recently released labour force supplementary surveys.

**3** This publication includes international data for selected labour market indicators.

#### LABOUR STATISTICS CONCEPTS, SOURCES AND METHODS

**4** The concepts and definitions underpinning ABS labour statistics align closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts of Australia's labour market statistics, and the sources and methods used in compiling the estimates, are presented in [Labour Statistics: Concepts, Sources and Methods](#) (cat. no. 6102.0.55.001), which is available on the ABS website at <https://www.abs.gov.au> [Themes - People - Labour - [Labour Statistics: Concepts, Sources and Methods](#)].

**5** For an explanation of terms used in this publication, refer to the Glossary.

#### LABOUR STATISTICS THEME PAGE

**6** The Labour Statistics theme page is a portal to all labour statistics and related information residing on the ABS website. The page contains hyperlinks to [Labour Statistics: Concepts, Sources and Methods](#) (cat. no. 6102.0.55.001); information about labour related surveys; and a help page for respondents to ABS labour related surveys. The Labour Theme Page can be accessed at <https://www.abs.gov.au> [Themes - People - Labour].

#### TREND ESTIMATES

**7** Series in this publication include **original** and **trend** series. Special care should be taken in interpreting data for the most recent months and quarters, as some of the original and all of the trend series are subject to revision.

**8** It is not uncommon for movements in original time series data and those provided from trend series to differ. Movements in a time series of original data may reflect several factors, including:

- longer-term changes in the item being measured (i.e. trend movements)
- short-term irregular changes
- regular seasonal influences
- normal 'trading', 'working' or 'pay' day patterns
- systematic holiday effects.

**9** Trend estimates help the user to identify the underlying magnitude and direction of a time series. Seasonal adjustment removes the effect of the last three listed influences from the data, leaving only trend and short-term irregular movements. Trend estimates are then obtained by removing the effects of the short-term irregularities, which in some series can be a major contributor to movements in the original data.

**10** Trend estimates are produced by smoothing the seasonally adjusted series using a statistical procedure based on Henderson moving averages. At each time point in a series, a trend estimate is calculated using a centred x-term Henderson moving average of the seasonally adjusted series. The moving averages are centred on the point in time at which the trend is being estimated. The number of terms used to calculate the trend varies across surveys. Generally, ABS monthly surveys use a 13-term moving average and quarterly surveys use a 7-term moving average.

**11** Estimates for the most recent time points cannot be calculated using the centred average method as there are insufficient data to do so. Instead, alternative approaches that approximate the smoothing properties of the Henderson moving average are used. This can lead to

revision in the trend estimates for the most recent time periods until sufficient data are available to calculate the trend using the centred Henderson moving average. Revisions of trend estimates will also occur with revisions to the original data and re-estimation of seasonal adjustment factors.

**12** Seasonal factors are reviewed at least annually for ABS labour series, to take account of additional original data. The results of the latest reviews were used to compile the trend estimates given in this publication. For further information about the most recent reviews of seasonal factors for the labour surveys, see the following publications:

- for labour force see [Labour Force, Australia](#) (cat. no. 6202.0)
- for labour price index see [Labour Price Index, Australia](#) (cat. no. 6345.0)
- for average weekly earnings see [Average Weekly Earnings, Australia](#) (cat. no. 6302.0)
- for public sector employees see [Wage and Salary Earners, Public Sector, Australia](#) (cat. no. 6248.0.55.001)
- for job vacancies see [Job Vacancies, Australia](#) (cat. no. 6354.0).

**13** The general methods used in the ABS for estimating trends are described in [Information Paper: A Guide to Interpreting Time Series - Monitoring Trends](#) (cat. no. 1349.0).

## RELIABILITY OF ESTIMATES

**14** Estimates in this publication are subject to two types of error:

- sampling error - errors that occur because the data were obtained from a sample rather than the entire population
- non-sampling error - errors that occur at any stage of a survey and can also occur in a census, e.g. incorrect responses to questions, processing errors, frame deficiencies.

**15** For more information on these sources of error, and on measures of these types of errors, including standard errors, refer to the main publications associated with each of the data series presented in this publication (see the relevant sections later in these Explanatory Notes). More information on standard errors applying to LFS estimates is contained in [Information Paper: Labour Force Survey Standard Errors, 2005](#) (cat. no. 6298.0). To assist users, a spreadsheet incorporating the revised standard error models using composite estimation is available from [Labour Force Survey Standard Errors, Data Cube, 2007](#) (cat. no. 6298.0.55.001).

## ROUNDING

**16** Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

## LABOUR FORCE SURVEY DATA

### Description of the survey

**17** Data in tables 1.1-1.7, 2.1-2.10, 3.1-3.3, 4.3, 4.4 and 4.5 are obtained from the Labour Force Survey (LFS), which provides extensive information about the labour market on a monthly basis. The LFS is a component of the Monthly Population Survey (MPS), which includes the LFS and supplementary surveys.

### Monthly Population Survey

**18** The MPS is a population survey based on a multi-stage area sample of private dwellings (currently about 30,000 houses, flats, etc.), and list samples of discrete Indigenous communities and non-private dwellings (hospitals, hotels, motels, etc.), and covers about 0.45% of the population of Australia. The information is obtained from occupants of selected dwellings by interviewers, with the first interview conducted face-to-face and subsequent interviews over the telephone. Once selected, households are included for eight consecutive months before being replaced.

### Labour Force Survey

**19** The LFS has been conducted on a monthly basis since February 1978. Prior to that, from 1964 to 1978, a national survey was conducted quarterly. Telephone interviewing was introduced between August 1996 and February 1997. New questionnaires have been introduced periodically, most recently in April 2001.

**20** The LFS includes all usual residents of Australia aged 15 and over except:

- members of the permanent defence forces
- certain diplomatic personnel of overseas governments, customarily excluded from census and estimated population counts
- overseas residents in Australia
- members of non-Australian defence forces (and their dependants) stationed in Australia.

**21** From July 1993, Jervis Bay Territory has been excluded from the scope of the LFS.

## Supplementary surveys

**22** The supplementary surveys collect additional data on a different topic each month. Many topics covered are rotated on an annual or less frequent basis, while others are included once only. Results from each supplementary survey topic are released separately. A list of topics covered in recent years is in Appendix 3.

**23** Tables 4.1, 4.2 and 4.3 contain data from the annual supplementary surveys Underemployed Workers and Persons Not in the Labour Force. These tables are updated annually.

**24** The supplementary surveys include a subset of the persons included in the LFS (see paragraph 20). The additional exclusions for most supplementary surveys are:

- persons living in private dwellings in remote and sparsely settled parts of Australia
- institutionalised persons
- boarding school pupils.

### Multi-Purpose Household Survey

**25** The Multi-Purpose Household Survey (MPHS) was introduced in 2004-05. This survey vehicle is designed to provide statistics annually for a number of small, self contained topics, including a number of labour related topics. Data for MPHS topics are collected each month over a financial year. A list of topics covered in recent years is in Appendix 3.

**26** In addition to those already excluded from the LFS, the following people are excluded from most MPHS topics:

- people under 15 years
- people living in private dwellings in very remote parts of Australia
- people living in non-private dwellings such as hotels, university residences, students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities) and inmates of prisons
- visitors to private dwellings.

**27** Depending on the topic, there may be further exclusions from scope. For example, some MPHS topics collect information only from a certain population or interest group (e.g. information on retirement and retirement intentions is collected from people aged 45 years or over).

### Reference period

**28** Interviews are generally conducted during the two weeks beginning on the Monday between the 6th and 12th of each month, with questions relating to the week prior to the interview (the reference week).

### Notes on data

**29** From time to time, changes to survey methodology affect the time series produced. Some examples of changes to this survey are: new questions added to the LFS questionnaire in April 2001; and the introduction of telephone interviewing in 1996-97.

**30** In February 2004 the definition of unemployed persons was changed to include all persons who were waiting to start work and were available to start in the reference week, with consequent revisions to data from April 2001 to January 2004. For further details, see **Information Paper: Forthcoming Changes to Labour Force Statistics, 2003** (cat. no. 6292.0).

**31** In May 2007, an improved method of estimation, known as composite estimation, was introduced into the Labour Force Survey. In introducing this change the ABS revised unit record data from April 2001 to April 2007 based on the new estimation method. While estimates for periods prior to April 2001 are unrevised and were compiled using a different estimation method, no trend break was identified in the employed persons series. Also, no change was identified in the trend breaks in the unemployed persons and unemployment rate series which arose with the introduction of a redesigned survey form in April 2001. For further details, see **Information Paper: Forthcoming Changes to Labour Force Statistics, 2007** (cat. no. 6292.0).

### Population benchmarks

**32** Labour Force Survey estimates are calculated in such a way as to add up to independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are projections of the most recently released quarterly Estimated Resident Population (ERP) data. For information on the methodology used to produce the ERP see **Australian Demographic Statistics Quarterly** (cat. no. 3101.0). To create the population benchmarks for the Labour Force Survey, the most recently released quarterly ERP estimates are projected forward one quarter past the period for which they are required. The projection is based on the historical pattern of each population component - births, deaths, interstate migration and overseas migration. By projecting one quarter past that needed for the current population benchmarks, demographic changes are smoothed in, thereby making them less noticeable in the population benchmarks.

**33** The ERP series are revised annually in the March quarter issue of **Australian Demographic Statistics Quarterly** (cat. no. 3101.0), released in September each year, to incorporate more up to date information available for the population components. The revised ERP estimates are used to update the quarterly population projections used in creating the Labour Force Survey population benchmarks. Benchmarks already used in producing the Labour Force Survey estimates are not updated. A process of smoothing is used in the creation of population benchmarks to reduce the effect of these annual revisions to ERP estimates on the Labour Force Survey population benchmarks.

**34** Every five years the ERP series are revised to incorporate additional information available from the latest Census of Population and Housing. Following the incorporation of Census information, the ERP series prior to the latest Census are final and subject to no further revision. Labour Force Survey population benchmarks, and the estimates, are revised following this 5-yearly revision in the ERP. From the February 2004 issue of this publication, labour force estimates have been compiled using population benchmarks based on the results of the 2001 Census of Population and Housing. Revisions were made in that issue to historical labour force estimates from January 1999 to January 2004.

### Estimation method

**35** The estimation method used in the Labour Force Survey is Composite Estimation, which was introduced in May 2007. Composite Estimation combines data collected in the previous six months with current month's data to produce the current month's estimates, thereby exploiting the high correlation between overlapping samples across months in the Labour Force Survey. The Composite Estimator combines the previous and current months' data by applying different factors according to length of time in the survey. After these factors are applied, the seven months of data are weighted to align with current month population benchmarks. For details see **Information Paper: Forthcoming Changes to Labour Force Statistics, 2007** (cat. no. 6292.0).

### Families series

**36** Family relationship is not determined for all households and persons in scope of the LFS. This is due to a number of factors related to the scope and coverage of the LFS, as well as difficulties in determining family structure and characteristics. The survey questions used to determine family relationships are restricted to persons enumerated as usual residents of private dwellings. That is, the following persons are excluded:

- all persons enumerated in non-private dwellings (including hotels, motels, hospitals and other institutions)
- persons enumerated as visitors to (rather than usual residents of) private dwellings.

**37** In addition, in those households where it is not possible to obtain information relating to all the usual residents, no family information is recorded. Thus, persons living in households that include a member of the permanent defence forces, who is outside the scope of the LFS, are excluded from survey questions used to determine family relationships. This also applies to households that, at the time of the survey, had one or more of their usual residents away for more than six weeks, and households from which an incomplete or inadequate questionnaire was obtained for any usual resident in scope of the survey.

### Further information and data on the LFS

**38** LFS estimates are published monthly in **Labour Force, Australia** (cat. no. 6202.0). A series of time series spreadsheets are released at the same time as this publication under cat. no. 6202.0.55.001. More detailed estimates are released, in electronic format, one week later, under cat. no. 6291.0.55.001 for monthly data, or cat. no. 6291.0.55.003 for quarterly data. All electronic data can be accessed via the ABS website at <https://www.abs.gov.au>. Additional data are available on request.

**39** For further information about the range of LFS products and services, and the concepts and methodology used in the LFS, refer to **Information Paper: Changes to Labour Force Survey Products** (cat. no. 6297.0), **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Assistant Director, Labour Force Survey on Canberra (02) 6252 6565.

### INTERNATIONAL DATA

**40** Table 1.8 contains data from the International Labour Organisation.

**41** Estimates of key indicators of the labour markets from various countries have been included for comparison with Australian estimates of labour force participation, employment, unemployment and unemployment rates.

### EMPLOYER SURVEY DATA

**42** Tables 2.11, 5.1-5.3, 6.1-6.2 and 7.1 of this publication contain data from ABS employer surveys.

### Scope of employer surveys

**43** Except where otherwise noted, the sample for ABS labour employer surveys is selected from the ABS Business Register, which is primarily based on registrations to the Australian Taxation Office's (ATO) Pay As You Go Withholding scheme. The population is updated quarterly to take account of new businesses, businesses that have ceased employing, changes in employment levels, changes in industry, and other general business changes. Businesses excluded from the scope of the employer surveys are:

- those primarily engaged in Agriculture, forestry and fishing (except for the Survey of Employment and Earnings)
- private households employing staff
- overseas embassies, consulates, etc.
- those located outside Australia.

## PUBLIC SECTOR EMPLOYEES DATA

### Description of the survey

44 Table 2.11 contains employment data from the Survey of Employment and Earnings - Public Sector (SEE).

45 The Survey of Employment and Earnings has been conducted on a quarterly basis since the September quarter 1983. The survey measures both the number of public sector wage and salary earners employed in the middle month of each quarter and their total quarterly earnings.

### Reference period

46 The reference period for employment is the last pay period ending on or before the third Friday of the middle month of the quarter.

### Notes on data

47 The private sector component of the Survey of Employment and Earnings was discontinued after the December quarter 2001.

48 The privatisation of Telstra Corporation in November 2006 significantly impacted the public sector employment series. Telstra Corporation was effectively privatised on 20 November 2006. For the purpose of ABS statistics this change from public sector to private sector is effective from March quarter 2007. For more information please see **Information Paper: Future Treatment of Telstra in ABS Statistics, 2007** (cat. no. 8102.0).

49 As a result of privatisation, Telstra Corporation was no longer in the scope of SEE, and Telstra data were excluded from the series from March quarter 2007. As a result, a trend break was applied to the Commonwealth government and total public sector employees series between November 2006 and February 2007.

### Further information

50 For further information about data relating to public sector employees, and the concepts and methodology used, refer to **Wage and Salary Earners, Public Sector, Australia** (cat. no. 6248.0.55.001), and **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Manager, Survey of Employment and Earnings, Public Sector on Perth (08) 93603141.

## WAGE PRICE INDEX DATA

51 Table 5.1 contains data from the **Labour Price Index, Australia** (cat. no. 6345.0) publication.

### Description of the survey

52 The Labour Price Index measures change in the price of labour in the Australian labour market, unaffected by changes in the quality or quantity of work performed. i.e. it is unaffected by changes in the composition of the labour force, hours worked, or changes in characteristics of employees (e.g. work performance). In the LPI, index numbers are compiled for a range of wage and non-wage costs. Information about the wage price indexes has been released for each quarter since September 1997. Approximately 20,000 matched jobs from 4,800 businesses are priced each quarter.

### Reference period

53 The reference period for the survey is the last pay period ending on or before the third Friday of the mid-month of the quarter.

### Further information

54 For further information about the range of products and services relating to the Wage Price Index, and the concepts and methodology used, refer to **Labour Price Index, Australia** (cat. no. 6345.0), **Labour Price Index, Concepts, Sources and Methods** (cat. no. 6351.0.55.001), **the associated time series spreadsheets available from the ABS website, or contact the Manager, Labour Price Index on Perth** (08) 9360 5151.

## AVERAGE WEEKLY EARNINGS DATA

55 Table 5.2 contains data from the Survey of Average Weekly Earnings (AWE).

### Description of the survey

56 The Survey of Average Weekly Earnings has been conducted quarterly since August 1981. Approximately 5,500 businesses contribute to

the survey each quarter. The purpose of the survey is to measure average gross weekly earnings of employee jobs in Australia.

**57** Average weekly earnings statistics represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the 'average person'. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings by estimates of number of employees. Changes in the averages may be affected not only by changes in the level of earnings of employees but also by changes in the overall composition of the wage and salary earner segment of the labour force.

#### Reference period

**58** The reference period for the survey is the last pay period ending on or before the third Friday of the middle month of the quarter. For non-weekly payrolls, businesses are asked to provide one week's portion.

#### Notes on data

**59** The privatisation of Telstra Corporation in November 2006 has significantly impacted on the private sector and public sector average weekly earnings series. Telstra Corporation was effectively privatised on 20 November 2006. For the purposes of ABS statistics this change from public sector to private sector is effective from March quarter 2007. The effect of this change is significant for both the private sector and public sector series. As a result, a trend break has been applied to both series between November 2006 and February 2007. For more information please see **Information Paper: Future Treatment of Telstra in ABS Statistics, 2007** (cat. no. 8102.0).

#### Further information

**60** For further information about average weekly earnings statistics and the concepts and methodology used refer to **Average Weekly Earnings, Australia** (cat. no. 6302.0), and **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Manager, Survey of Average Weekly Earnings on Perth (08) 9360 5304.

#### NATIONAL ACCOUNTS DATA

**61** Table 5.3 contains data from the Australian National Accounts.

**62** Estimates of compensation of employees are contained within the Income Accounts of the Australian National Accounts, which are published in **Australian System of National Accounts** (cat. no. 5204.0) and **Australian Economic Indicators** (cat. no. 1350.0). For further information on how estimates are obtained, see **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0).

#### INDUSTRIAL DISPUTES DATA

**63** Tables 6.1 and 6.2 contain data from the Industrial Disputes collection.

#### Description of the survey

**64** The ABS has been collecting information about industrial disputes since 1913. The Industrial Disputes collection produces estimates of the number of industrial disputes (where ten or more working days are lost), employees involved, and working days lost.

**65** The scope of the Industrial Disputes collection is restricted to employing businesses at which an industrial dispute has occurred. For this collection, industrial disputes are defined as work stoppages of ten working days or more. Ten working days are equivalent to the amount of ordinary time worked by ten people in one day, regardless of the length of the stoppage, e.g. 3,000 workers on strike for two hours would be counted as 750 working days lost (assuming they work an eight-hour day).

**66** Effects on other establishments not directly involved in the dispute, such as stand-downs because of lack of materials, disruption of transport services, power cuts, etc. are not included in the scope of this collection.

#### Reference period

**67** The collection reference period is the calendar quarter.

#### Further information

**68** For further information about industrial disputes statistics, and the concepts and methodology used, refer to the electronic publication **Industrial Disputes, Australia** (cat. no. 6321.0.55.001), and **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), or contact the Manager, Industrial Disputes on Perth (08) 9360 5159.

#### JOB VACANCIES DATA

69 Table 7.1 contains data from the Job Vacancies Survey (JVS).

### Description of the survey

70 The current Job Vacancies Survey has been conducted since November 1983 and is a quarterly sample survey of approximately 5,000 employers. The survey produces estimates of the number of job vacancies in Australia.

### Reference date

71 The reference date for the survey is the third Friday of the middle month of the quarter.

### Notes on data

72 Prior to the August quarter 1999, job vacancies statistics were collected as part of the Job Vacancies and Overtime Survey. The overtime component of the survey ceased following the May quarter 1999.

73 The privatisation of Telstra Corporation in November 2006 impacted the private sector and public sector job vacancies series. For the purposes of ABS statistics this change from public sector to private sector was effective from March quarter 2007. For more information please see **Information Paper: Future Treatment of Telstra in ABS Statistics, 2007** (cat. no. 8102.0).

74 Although the privatisation of Telstra Corporation in November 2006 impacted on both the private and public sector series, the effect was significant only for the public sector series. As a result, a trend break was applied to the public sector series between November 2006 and February 2007.

### Further information

75 For further information about the range of products and services relating to ABS job vacancies statistics, and the concepts and methodology used, refer to **Job Vacancies, Australia** (cat. no. 6354.0), **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001), **the associated time series spreadsheets available from the ABS website, or contact the Manager, Job Vacancies Survey on Perth** (08) 9360 5304.

## Glossary

### GLOSSARY

#### Active steps to find work

Includes writing, telephoning or applying in person to an employer for work; answering an advertisement for a job; checking factory noticeboards or the touchscreens at Centrelink offices; being registered with Centrelink as a jobseeker; checking or registering with any other employment agency; advertising or tendering for work; and contacting friends or relatives.

#### Actual hours worked

The hours actually worked during the reference week, not necessarily hours paid for.

#### Adult employees

Adult employees are those employees 21 years of age or over and those employees who, although under 21 years of age, are paid at the full adult rate for their occupation.

#### Aggregate (actual) hours worked

The total number of hours a group of employed persons has actually worked during the reference week, not necessarily hours paid for.

#### Attending full-time education

Persons aged 15-24 years who were enrolled full-time at secondary school, high school, Technical and Further Education (TAFE) college, university, or other educational institution in the reference week.

#### Average compensation per employee

**National Accounts.** The total compensation of employees divided by the number of employees.

#### **Average earnings (National Accounts basis)**

See **average compensation per employee**.

#### **Average hours worked**

Aggregate hours worked by a group divided by the number of persons in that group.

#### **Average weekly earnings**

Average weekly earnings represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the 'average person'. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings by estimates of number of employees. For information about scope exclusions applying to employer surveys, refer to paragraph 43 of the Explanatory Notes.

#### **Civilian population aged 15 years and over**

All usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

#### **Commonwealth government employees**

Employees of all departments, agencies and authorities created by or reporting to the Commonwealth Parliament. Those bodies run jointly by the Commonwealth Government and state governments are classified to Commonwealth.

#### **Compensation of employees**

**National Accounts.** The total remuneration, in cash or in kind, payable by enterprises to employees in return for work done by the employees during the accounting period. Compensation of employees comprises wages and salaries (in cash and in kind) and **employers' social contributions**. Compensation of employees is not payable in respect of unpaid work undertaken voluntarily, including the work done by members of a household within an unincorporated enterprise owned by the same household. Compensation of employees excludes any taxes payable by the employer on the wage and salary bill (e.g. payroll tax, fringe benefits tax). See **Australian System of National Accounts: Concepts, Sources and Methods** (cat. no. 5216.0) for further information.

#### **Contributing family worker**

A person who works without pay, in an economic enterprise operated by a relative.

#### **Country of birth**

Classified according to the **Standard Australian Classification of Countries (SACC)** (cat. no. 1269.0).

#### **Couple families**

A family based on two persons who are in a registered or de facto marriage and who are usually resident in the same household.

#### **Dependants**

All family members under 15 years, and all children aged 15-24 years attending full-time education (except those who have a partner or child of their own usually resident in the household).

#### **Dependent child**

Any child in a family under 15 years of age or aged 15-24 years who is attending full-time education (except those who have a partner or child of their own usually resident in the household).

#### **Dependent student**

A child who is 15-24 years of age, who is attending full-time education, and who has no partner or child of his or her own usually resident in

the same household.

### **Discouraged jobseekers**

Persons with marginal attachment to the labour force who wanted to work and were available to start work within the next four weeks but whose main reason for not actively looking for work was that they believed they would not find a job for any of the following reasons:

- considered to be too young by employers
- considered to be too old by employers
- lacked necessary schooling, training, skills or experience
- difficulties because of language or ethnic background
- no jobs in their locality or line of work
- no jobs available at all.

### **Duration of unemployment**

Under the redesigned LFS questionnaire, implemented in April 2001, the definition of duration of unemployment is the period of time from when an unemployed person began looking for work, until the end of the reference week; or the period of time since an unemployed person last worked in any job for two weeks or more, until the end of the reference week; whichever was the shorter period.

Prior to April 2001, duration of unemployment was defined in the LFS as the period of time from when an unemployed person began looking for work, until the end of the reference week; or the period of time since an unemployed person last worked full-time for two weeks or more, until the end of the reference week; whichever was the shorter period.

### **Employed**

Employed persons include all persons aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to return to their job; or
- were employers or own account workers, who had a job, business or farm, but were not at work.

### **Employed full-time**

See **full-time employed**.

### **Employed part-time**

See **part-time employed**.

### **Employee**

**Labour Force Survey and other household surveys.** A person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or a person who operates their own incorporated enterprise with or without hiring employees.

**Employer surveys.** Employees are wage and salary earners who received pay for any part of the reference period. For information about scope exclusions applying to employer surveys, refer to paragraph 43 of the Explanatory Notes.

### **Employee job**

**Wage Price Index.** A job for which the occupant receives remuneration in wages, salary, payment in kind, or piece rates. All employee jobs in all employing organisations (except those excluded from all ABS labour employer surveys) are in scope of the WPI, except the following:

- 'non-maintainable' jobs (i.e. jobs that are expected to be occupied for less than six months of a year)
- jobs for which wages and salaries are not determined by the Australian labour market (e.g. working proprietors of small incorporated enterprises, most employees of Community Development Employment Programs, jobs where the remuneration is set in a foreign country).

For information about scope exclusions applying to employer surveys, refer to paragraph 43 of the Explanatory Notes.

## **Employer**

**Labour Force Survey and other household surveys.** A person who operates their own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.

**Employer surveys.** A business with one or more employees.

## **Employers' social contributions**

**National Accounts.** Contributions by employers to pension and superannuation funds; and premiums paid by employers to workers' compensation schemes for occupational injuries and diseases.

## **Extended labour force underutilisation rate**

The unemployed, plus the underemployed, plus two groups of marginally attached to the labour force:

- (i) persons actively looking for work, not available to start work in the reference week, but available to start work within four weeks and
- (ii) discouraged jobseekers

as a percentage of the labour force augmented by (i) and (ii).

## **Family**

Two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

## **Family reference person**

In families which are not couple families or one-parent families, as defined, the family reference person is the eldest person in the household.

## **Former workers**

Unemployed persons who have previously worked for two weeks or more but not in the last two years.

## **Full-time educational attendance**

Persons aged 15-19 who, during the reference week were enrolled full-time at secondary or high schools, and those aged 15-24 who, during the reference week, were enrolled full-time at a Technical and Further Education (TAFE) college, university, or other tertiary educational institution.

## **Full-time employed**

**Household surveys.** Persons employed full-time are those employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

## **Full-time employees**

**Employer surveys.** Full-time employees are permanent, fixed term and casual employees who normally work the agreed or award hours for a full-time employee in their occupation and received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more per week.

## **Gross domestic product (GDP)**

**National Accounts.** The total market value of goods and services produced in Australia within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. Thus gross domestic product, as here defined, is at 'market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services. See [Australian System of National Accounts: Concepts, Sources and Methods](#) (cat. no. 5216.0) for further information.

## **Gross mixed income (GMI)**

**National Accounts.** The owners of unincorporated enterprises, or other members of their households, may work without receiving any wage or salary. Mixed income includes both **gross operating surplus** for the unincorporated enterprises and returns for the proprietors' own labour (akin to wages and salaries). See [Australian System of National Accounts: Concepts, Sources and Methods](#) (cat. no. 5216.0) for further information.

### Gross operating surplus (GOS)

**National Accounts.** The amount of gross output remaining after subtracting costs incurred in producing that output, but before any deductions for consumption of fixed capital. See [Australian System of National Accounts: Concepts, Sources and Methods](#) (cat. no. 5216.0) for further information.

### Household

A group of one or more persons in a private dwelling who consider themselves to be separate from other persons (if any) in the dwelling, and who make regular provision to take meals separately from other persons, i.e. at different times or in different rooms. Lodgers who receive accommodation but no meals are treated as separate households. Boarders who receive both accommodation and meals are not treated as separate households. A household may consist of any number of families and non-family members.

### Industrial dispute

An industrial dispute is defined as a state of disagreement over an issue or group of issues between an employer and its employees, which results in employees ceasing work. Industrial disputes comprise strikes, which are a withdrawal from work by a group of employees; and lockouts, which are a refusal by an employer or group of employers to permit some or all of their employees to work.

### Industry

An industry is a group of businesses or organisations that perform similar sets of activities in terms of the production of goods and services. Industry is classified according to the [Australian and New Zealand Standard Industrial Classification \(ANZSIC\), 1993](#) (cat. no. 1292.0). The industry assigned to an employed person is the industry of the organisation in which the person's main job is located. Unemployed persons who had worked for two weeks or more in the last two years are classified according to the industry of their most recent job.

### Job leavers

Unemployed persons who have worked for two weeks or more in the past two years and **left that job voluntarily** - that is, because (for example): of unsatisfactory work arrangements/pay/hours; the job was a holiday job or they left the job to return to studies; or their last job was running their own business and they closed down or sold that business for reasons other than financial difficulties.

### Job losers

Unemployed persons who have worked for two weeks or more in the past two years and **left that job involuntarily**: that is, they were laid off or retrenched from that job; left that job because of their own ill-health or injury; the job was seasonal or temporary; or their last job was running their own business and the business closed down because of financial difficulties.

### Job vacancy

A job vacancy is an employee job available for immediate filling on the survey reference date and for which recruitment action has been taken. Recruitment action includes efforts to fill vacancies by advertising, by factory notices, by notifying public or private employment agencies or trade unions and by contacting, interviewing or selecting applicants already registered with the enterprise or organisation. Excluded are vacancies:

- for jobs which became vacant on the survey date and were filled that same day
- for jobs of less than one day's duration
- to be filled by persons already hired, or by promotion or transfer of existing employees
- to be filled by employees returning from paid or unpaid leave or after industrial dispute(s)
- not available for immediate filling on the survey reference date
- for work to be carried out by contractors
- for which no recruitment action has been taken
- where a person has been appointed but has not yet commenced duty
- to be filled by staff from contract labour agencies
- for jobs available only to persons already employed by the enterprise or organisation.

For information about scope exclusions applying to employer surveys, refer to paragraph 43 of the Explanatory Notes.

### Labour force

The labour force is the labour supply available for the production of economic goods and services in a given period, and is the most widely used measure of the economically active population. Persons in the labour force are classified as either employed or unemployed according

to their activities during the reference period by using a specific set of priority rules.

### **Labour force status**

A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.

### **Labour force underutilisation rate**

The unemployed plus the underemployed, as a percentage of the labour force.

### **Local government employees**

Employees of municipalities and shires and other local authorities created by or subject to the provisions of local government legislation, such as county councils in New South Wales.

### **Lone parent**

A person who has no spouse or partner present in the household but who forms a parent-child relationship with at least one dependent or non-dependent child usually resident in the household.

### **Lone person**

A person who makes provision for their food and other essentials for living, without combining with any other person to form part of a multi-person household. They may live in a dwelling on their own or share a dwelling with another individual or family.

### **Long-term unemployed**

Persons unemployed for 12 months or more. See **duration of unemployment** for details of the calculation of duration of unemployment.

### **Long-term unemployment rate**

The number of long-term unemployed persons expressed as a percentage of the labour force.

### **Marginal attachment to the labour force**

Persons who were not in the labour force in the reference week, wanted to work, and:

- were actively looking for work but did not meet the availability criteria to be classified as unemployed or
- were not actively looking for work but were available to start work within four weeks or could start work within four weeks if child care was available.

The criteria for determining those in the labour force are based on activity (i.e. working or looking for work) and availability to start work during the reference week. The criteria associated with marginal attachment to the labour force, in particular the concepts of wanting to work and reasons for not actively looking for work, are more subjective. Hence, the measurement against these criteria is affected by the respondent's own interpretation of the concepts used. An individual respondent's interpretation may be affected by their work aspirations, as well as family, economic and other commitments.

### **Marital status**

See **social marital status**.

### **Mean age**

The sum of the ages of all the persons in a group, divided by the total number of persons in that group.

### **Mean duration of unemployment**

The sum of the duration of unemployment of all the unemployed persons in a group, divided by the total number of unemployed persons in that group.

### **Median age**

The age which divides a group of persons into two equal groups: one comprising persons whose age is above the median; and the other, persons whose age is below it.

### **Median duration of unemployment**

The duration which divides unemployed persons into two equal groups: one comprising persons whose duration of unemployment is above the median; and the other, persons whose duration is below it.

### **Non-dependent child**

A child of a couple or lone parent usually resident in the household, aged over 15 years and who is not a dependent student aged 15-24 years, and who has no partner or child of their own usually resident in the household.

### **Non-family member**

A person who is not related to any other member of the household in which they are living.

### **Not in the labour force**

Persons who were not classified as employed or unemployed.

### **Occupation**

An occupation is a collection of jobs that are sufficiently similar in their main tasks to be grouped together for the purposes of classification. Occupation is classified according to the [\*\*ASCO Australian Standard Classification of Occupations, Second Edition\*\*](#) (cat. no. 1220.0). The occupation assigned to an employed person relates to the person's main job. Unemployed persons who had worked for two weeks or more in the last two years are classified according to the occupation of their most recent job.

### **One-parent family**

A family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household.

### **Ordinary time earnings**

See **weekly ordinary time earnings**.

### **Original series**

Estimates produced directly from the survey data, before seasonal adjustment or trend estimation takes place.

### **Other family**

Related individuals residing in the same household who do not form a couple or parent-child relationship with any other person in the household and are not attached to a couple or one parent family in the household. If two brothers, for example, are living together and neither is a spouse, a lone parent or a child, then they are classified as other family.

### **Overtime earnings**

See **weekly overtime earnings**.

### **Own-account worker**

A person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees.

### **Participation rate**

The labour force participation rate for any group within the population is the labour force component of that group, expressed as a percentage of the population in that group.

## **Part-time employed**

**Household surveys.** Persons employed part-time are those employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

## **Reason for leaving last job**

Unemployed persons who had worked for two weeks or more in the past two years classified by whether they left that job voluntarily, that is, job leavers; or left that job involuntarily, that is, job losers.

## **Seasonally adjusted series**

A time series of estimates with the estimated effects of normal seasonal variation removed. See paragraphs 7-13 of the Explanatory Notes for more detail.

## **Social marital status**

Social marital status is the relationship status of an individual with reference to another person who is usually resident in the household. A marriage exists when two people live together as husband and wife, or partners, regardless of whether the marriage is formalised through registration. Individuals are, therefore, regarded as married if they are in a de facto marriage, or if they are living with the person to whom they are registered as married.

## **State capital cities**

The areas determining the six state capital cities are the Statistical Divisions for those capital cities defined in the **Statistical Geography: Volume 1 - Australian Standard Geographical Classification (ASGC)** (cat. no. 1216.0).

## **State government employees**

Employees of all State government departments and authorities created by, or reporting to, State Parliaments, including organisations for which the Commonwealth has assumed financial responsibility. Following self-government, the Northern Territory and the Australian Capital Territory administrations have been classified to State Governments. Employees of State Governments employed interstate are included in the estimates of the State in which they are based.

## **Status in employment**

Employed persons classified by whether they were employees, employers, own account workers or contributing family workers.

## **Total earnings**

See **weekly total earnings**.

## **Total hourly rates of pay index excluding bonuses**

**Wage Price Index.** This index measures quarterly change in a weighted combination of ordinary time and overtime hourly rates of pay. See **Labour Price Index, Australia** (cat. no. 6345.0) for more information.

## **Trend series**

A smoothed seasonally adjusted series of estimates. See paragraphs 7-13 of the Explanatory Notes for more detail.

## **Underemployed workers**

Underemployed workers are employed persons who want, and are available for, more hours of work than they currently have. They comprise:

- persons employed part-time who want to work more hours and are available to start work with more hours, either in the reference week or in the four weeks subsequent to the survey
- persons employed full-time who worked part-time hours in the reference week for economic reasons (such as being stood down or insufficient work being available). It is assumed that these people wanted to work full-time in the reference week and would have been available to do so.

## **Underemployment rate**

The number of underemployed workers expressed as a percentage of the labour force.

### **Unemployed**

Persons aged 15 years and over who were not employed during the reference week, and

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week, or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

### **Unemployed looking for first full-time job**

Unemployed persons looking for full-time work who had never worked full-time for two weeks or more.

### **Unemployed looking for first job**

Unemployed persons who had never worked for two weeks or more.

### **Unemployed looking for full-time work**

Unemployed persons who:

- actively looked for full-time work, or
- were waiting to start a new full-time job.

### **Unemployed looking for part-time work**

Unemployed persons who:

- actively looked for part-time work only, or
- were waiting to start a new part-time job.

### **Unemployment rate**

The number of unemployed persons expressed as a percentage of the labour force.

### **Unemployment to population ratio**

For any group, the number of unemployed persons expressed as a percentage of the civilian population aged 15 and over in the same group.

### **Usual hours worked**

The hours usually worked per week by an employed person.

### **Wage and salary earners**

See **employee**.

### **Weekly ordinary time earnings**

Weekly ordinary time earnings refers to one week's earnings of employees for the reference period attributable to award, standard or agreed hours of work, calculated before taxation and any other deductions (e.g. superannuation, board and lodging) have been made. Included are piecework payments and one week's portion of regular production and task bonuses and commissions. Excluded are overtime payments and payments not related to the reference period, e.g. bonus payments for earlier periods of work.

### **Weekly overtime earnings**

Weekly overtime earnings refers to payment for hours worked in the reference week in excess of award, standard or agreed hours of work, calculated before taxation and any other deductions (e.g. superannuation) have been made.

### **Weekly total earnings**

Weekly total earnings of employees is equal to weekly ordinary time earnings plus weekly overtime earnings.

### Working days lost

Refers to working days lost by employees directly and indirectly involved in the dispute.

### Working days lost per thousand employees

Calculated for a quarterly period by dividing the total number of working days lost in the period by the total number of employees in the Australian labour force in the period (obtained from the ABS Labour Force Survey) and multiplying by 1,000.

## Abbreviations

### ABBREVIATIONS

The following symbols and abbreviations are used in this publication:

ABS	Australian Bureau of Statistics
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
ATO	Australian Taxation Office
AWE	average weekly earnings
EEH	Survey of Employee Earnings and Hours
ERP	estimated resident population
GDP	gross domestic product
ID	industrial disputes
ILO	International Labour Organization
JVS	Job Vacancies Survey
LFS	Labour Force Survey
LPI	labour price index
MPHS	Multi-Purpose Household Survey
MPS	Monthly Population Survey
qtr	quarter
RSE	relative standard error
SEE	Survey of Employment and Earnings
WPI	wage price index

## Data sources for tables (Appendix)

### APPENDIX 1 DATA SOURCES FOR TABLES

#### HOW TO FIND DATA SOURCES

All ABS statistics can be downloaded free of charge from the ABS website.

To find a labour market related publication, spreadsheet or datacube on the ABS website, go to <https://www.abs.gov.au> [Statistics - By Catalogue Number - 6. Labour Statistics and Prices]. All products can be accessed by catalogue number and subject e.g. to find the publication **Labour Force, Australia** (cat. no. 6202.0), look under '62. Labour force'. Select '6202.0 - Labour Force, Australia' and from the Summary tab select the Details tab.

No.	Table description	Data source	Notes
1.1	Labour force status: trend series	Labour Force, Australia (cat. no. 6202.0)	
1.2	Age by marital status	6202.0.55.001 spreadsheet table 1	
1.3	States and territories	6291.0.55.001 spreadsheet table 1	
		Labour Force, Australia (cat. no. 6202.0)	Excludes Capital city/balance of state
		6291.0.55.001 spreadsheet table 2	
1.4	Educational attendance	6291.0.55.001 spreadsheet table 3a	More detailed Age
1.5	Country of birth	6291.0.55.001 data cube LM4	Includes Sex, State, less detailed Country of birth
		6291.0.55.001 data cube LM5	Includes Sex, Age, State, less detailed Country of birth
		6291.0.55.001 data cube LM6	Includes Sex, State
		6291.0.55.001 data cube LM7	Includes Sex, State, less detailed Country of birth
	Year of arrival	6291.0.55.001 data cube LM4	Includes Sex, State, less detailed Country of birth
		6291.0.55.001 data cube LM7	Includes Sex, State, less detailed Country of birth

1.6 Relationship in household	6291.0.55.001 data cube FM1 6291.0.55.001 data cube FM2 6291.0.55.001 data cube FM3 6291.0.55.001 data cube FM4	Includes State Includes Age Includes Hours worked Unemployed persons only, includes Duration of unemployment June data only
1.7 Families	6224.0.55.001 data cube FA2	
1.8 International comparisons	International Labour Organisation, Year Book of Labour Statistics 1998, 2000, 2001 and 2002 International Labour Organisation, Key Indicators of the Labour Market 2001-02 International Labour Organisation, LABORSTA database: <a href="http://laborsta.ilo.org">http://laborsta.ilo.org</a>	
2.1 Industry: trend	6291.0.55.003 spreadsheet table 4	Includes Employed full-time, Employed part-time
2.2 Industry: divisions and subdivisions	6291.0.55.003 spreadsheet table 6 6291.0.55.003 data cube E03 6291.0.55.003 data cube E05 6291.0.55.003 data cube E06	Includes Sex, State, Hours worked, less detailed Industry Includes Sex, Age, Status in employment, Hours worked Includes Sex, State, Status in employment, Hours worked, more detailed Industry
2.3 Occupation	6291.0.55.003 spreadsheet table 7 6291.0.55.003 spreadsheet table 12 6291.0.55.003 data cube E07 6291.0.55.003 data cube E08	Less detailed Occupation Includes Hours worked, less detailed Occupation Includes Age, Hours worked, Status in employment Includes State, Status in employment, more detailed Occupation
2.4 Industry and occupation by full-time/part-time status	6291.0.55.003 data cube E09	Includes State, Hours worked
2.5 Industry by status in employment	6291.0.55.003 data cube E04 6291.0.55.003 data cube E05 6291.0.55.003 data cube E06 6291.0.55.003 data cube E04 6291.0.55.003 data cube E07 6291.0.55.003 data cube E08	Includes Sex, State, excludes Industry Includes Sex, Age, more detailed Industry Includes Sex, State, more detailed Industry Includes Sex, State, excludes Occupation Includes Sex, Age, more detailed Occupation Includes Sex, State, more detailed Occupation
Occupation by status in employment		
Hours worked in all jobs by status in employment	6291.0.55.001 spreadsheet table 8 6291.0.55.003 spreadsheet table 13 6291.0.55.003 data cube E04 6291.0.55.003 data cube E05 6291.0.55.003 data cube E06 6291.0.55.003 data cube E07 6291.0.55.003 data cube E08	Excludes Hours worked, includes Sex, Employed full-time, Employed part-time Includes Sex Includes Sex, State Includes Sex, Age, Industry Includes Sex, State, Industry Includes Sex, Age, Occupation Includes Sex, State, Occupation
2.6 Average hours worked in all jobs by Industry	6291.0.55.003 spreadsheet table 11 6291.0.55.003 data cube E03 6291.0.55.003 data cube E05 6291.0.55.003 data cube E06 6291.0.55.003 data cube E09	Includes State Includes Age, Status in employment, more detailed Industry Includes State, Status in employment, more detailed Industry Includes State, Occupation
Average hours worked in all jobs by occupation	6291.0.55.003 spreadsheet table 12 6291.0.55.003 data cube E07 6291.0.55.003 data cube E08 6291.0.55.003 data cube E09	Includes Age, Status in employment, more detailed Occupation Includes State, Status in employment, more detailed Occupation Includes State, Industry
2.7 Actual hours worked in all jobs	6291.0.55.003 data cube E03 6291.0.55.001 spreadsheet table 9 6291.0.55.003 spreadsheet table 11 6291.0.55.003 spreadsheet table 12 6291.0.55.003 spreadsheet table 13 6291.0.55.001 data cube EM1 6291.0.55.003 data cube E03 6291.0.55.003 data cube E04	Includes Industry Includes Occupation Includes Status in employment Includes Age, State Includes State, Industry Includes State, Status in employment
2.8 Actual hours worked in all jobs	6291.0.55.001 spreadsheet table 9 6291.0.55.003 spreadsheet table 11 6291.0.55.003 spreadsheet table 12 6291.0.55.003 spreadsheet table 13 6291.0.55.001 data cube EM1 6291.0.55.003 data cube E03 6291.0.55.003 data cube E04	Includes Industry Includes Occupation Includes Status in employment Includes Age, State Includes State, Industry Includes State, Status in employment
Usual hours worked in all jobs	6291.0.55.001 spreadsheet table 10 6291.0.55.001 data cube EM3 6291.0.55.001 data cube E10	Includes Age, State Includes State, Industry
2.9 Full-time workers who worked less than 35 hours in all jobs	6291.0.55.001 data cube EM2	Includes Age, State, Hours worked
2.10 Future employment expectations by job tenure	6291.0.55.003 data cube E02	Excludes Future employment expectations, Includes Job tenure, State, Age

2.11 Public sector employees	Wage and Salary Earners, Public Sector, Australia (cat. no. 6248.0.55.001)	
Public sector employees: Australia totals	6248.0.55.001 spreadsheet table 1	Includes State
Public sector employees by level of government: trend	6248.0.55.001 spreadsheet table 2	Includes Commonwealth government, State, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 3	Includes State government, State, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 4	Includes Local government, State, seasonally adjusted and original data
Public sector employees by State: trend	6248.0.55.001 spreadsheet table 1	Includes seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 2	Includes Commonwealth government, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 3	Includes State government, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 4	Includes Local government, seasonally adjusted and original data
	6248.0.55.001 spreadsheet table 7a	Includes Industry
Public sector employees by industry: original	6248.0.55.001 spreadsheet table 7a	Includes State
3.1 Unemployed persons: duration of unemployment by age	6291.0.55.001 data cube UM2	Excludes Age, median Duration of unemployment
	6291.0.55.001 data cube UM3	Excludes median Duration of unemployment
3.2 Long-term unemployed	6291.0.55.001 spreadsheet table 14B	
	6291.0.55.001 data cube UM2	Excludes trend data, includes State, more detailed Duration of unemployment
	6291.0.55.001 data cube UM3	Excludes trend data, includes State, Age
3.3 Unemployed persons: reason for unemployment by industry of last job	6291.0.55.003 data cube UQ1	Excludes Industry of last job
	6291.0.55.003 data cube UQ2	Excludes Reason for unemployment
Unemployed persons: reason for unemployment by occupation of last job	6291.0.55.003 data cube UQ1	Excludes Occupation of last job
	6291.0.55.003 data cube UQ3	Excludes Reason for unemployment
4.1 Underutilised labour	6105.0 spreadsheet table 1	
4.2 Underutilised labour	6105.0 spreadsheet table 1	
4.3 Underutilised labour	6105.0 spreadsheet table 1	
4.4 Part-time workers	6291.0.55.003 data cube E01	Less detailed Hours worked
4.5 Persons not in the labour force	6291.0.55.001 data cube NM1	
5.1 Labour price index	Labour Price Index, Australia (cat. no. 6345.0)	
Labour price index: trend data	6345.0 spreadsheet table 1	
Labour price index: Australia, states and territories	6345.0 spreadsheet table 2b	
Labour price index: private sector	6345.0 spreadsheet table 3b	Includes States and territories
Labour price index: public sector	6345.0 spreadsheet table 4b	Includes States and territories
Labour price index: industry	6345.0 spreadsheet table 5b	Includes Sector
Labour price index: occupation	6345.0 spreadsheet table 7b	Includes Sector
5.2 Average weekly earnings	Average Weekly Earnings, Australia (cat. no. 6302.0)	
Average weekly earnings by sex	6302.0 spreadsheet table 1	Includes Full-time adult total earnings
Average weekly earnings: private sector	6302.0 spreadsheet table 4	Includes Full-time adult total earnings
Average weekly earnings: public sector	6302.0 spreadsheet table 7	Includes Full-time adult total earnings
5.3 Compensation of employees	Australian National Accounts: National Income, Expenditure and Product (cat. no. 5206.0)	
6.1 Industrial disputes: working days lost	Industrial Disputes, Australia (cat. no. 6321.0.55.001)	
Industrial disputes: working days lost by state	6321.0.55.001 spreadsheet table 3a	
Industrial disputes: working days lost by industry	6321.0.55.001 spreadsheet table 2a	
6.2 Industrial disputes: working days lost per 1,000 employees	Industrial Disputes, Australia (cat. no. 6321.0.55.001)	
Industrial disputes: working days lost per 1,000 employees by state	6321.0.55.001 spreadsheet table 3b	
Industrial disputes: working days lost per 1,000 employees by industry	6321.0.55.001 spreadsheet table 2b	
7.1 Job vacancies	Job Vacancies, Australia (cat. no. 6354.0)	
Job vacancies: Australia, states and territories	6354.0 spreadsheet table 1	

## List of Articles (Appendix)

### APPENDIX 2 LIST OF ARTICLES

January 2008

Spotlight: First job starters

[Technical report: Jurisdictional coverage of pay-setting arrangements](#)

#### **October 2007**

[Spotlight: Available labour of the unemployed](#)

[Technical report: Census and the Labour Force Survey](#)

#### **July 2007**

[Spotlight: Employment type](#)

#### **April 2007**

[Spotlight: Methods of setting pay](#)

[Spotlight: Updated volume measures of labour underutilisation](#)

#### **January 2007**

[Technical report: ABS measures of employee remuneration](#)

#### **October 2006**

[Changes in where people work over time](#)

#### **July 2006**

[Job search experience of unemployed people](#)

[Labour force transitions](#)

[Spotlight: Employment type](#)

#### **April 2006**

[Spotlight: Updated volume measures of labour underutilisation](#)

#### **January 2006**

[Labour outcomes of migrants](#)

[The relationship between GDP and employment](#)

[Spotlight: Long-term unemployment](#)

#### **October 2005**

[Job starters](#)

[Comparison of ABS measures of employee remuneration](#)

[Spotlight: Employment type](#)

[Technical report: Standard error models for the Labour Force Survey](#)

[Technical report: Proposals from the review of ABS working arrangements statistics](#)

## **July 2005**

[Full-time and part-time participation in Australia: a cohort analysis](#)

[Population, participation and productivity: contributions to Australia's economic growth](#)

[Spotlight: Employee share schemes](#)

[Technical report: Changes to coding processes for industry and occupation in the Labour Force Survey](#)

## **April 2005**

[People who work few hours](#)

[Health, disability, age and labour force participation](#)

[Spotlight: Methods of setting pay](#)

[Spotlight: Annual measures of labour underutilisation](#)

## **January 2005**

[Labour force participation in Australia](#)

[Experimental estimates of the average age at withdrawal from the labour force](#)

[Spotlight: Employment in information and communication technology \(ICT\)](#)

[Spotlight: Labour Price Index](#)

[Technical report: Implementation of computer assisted interviewing in the Labour Force Survey](#)

## **October 2004**

[Changes in types of employment](#)

[Mature age people and the labour force](#)

## **July 2004**

[Children living without an employed parent](#)

[Labour underutilisation](#)

[Spotlight: Industrial disputes](#)

[Technical report: Labour Force Survey regions](#)

## **April 2004**

[Job search experience: methods and barriers in finding jobs](#)

[Trade union membership](#)

[Spotlight: Occupation](#)

[Technical report: Improvements to Labour Force estimates](#)

## **January 2004**

[Employment in information and communication technology](#)

[Labour force participation: international comparison](#)

[Technical report: Changes to Labour Force Survey seasonal adjustment processes](#)

## **October 2003**

[Labour market transitions of teenagers](#)

[Spotlight: Country of birth](#)

[Spotlight: Multiple job holders](#)

[Technical report: New Labour Force Survey sample selections: analysis of the effort on estimates](#)

## **July 2003**

[Experimental volume measures of labour underutilisation](#)

[Unemployment and participation rates in Australia: a cohort analysis](#)

[Spotlight: Population, participation and productivity: contributions to Australia's economic growth](#)

[Technical report: Measures of weekly hours worked](#)

## **April 2003**

[Do job vacancies provide a leading indicator of employment growth?](#)

[Characteristics of underemployed workers](#)

[Spotlight: Parental leave](#)

[Spotlight: Methods of setting pay](#)

[Technical report: Labour Force Survey sample redesign](#)

**Note:** the following articles appeared in **Labour Force, Australia** (cat. no. 6203.0).

## **February 2003**

[Seasonal reanalysis of monthly labour force estimates](#)

## **December 2002**

[Volatility of labour force estimates](#)

## **October 2002**

Measures of labour underutilisation

## **February 2002**

[Seasonal reanalysis of monthly labour force estimates](#)

## **October 2001**

[Full-time and part-time employment](#)

## **August 2001**

Experimental estimates: labour force characteristics of Indigenous Australians

## **June 2001**

[Duration of unemployment: recent definitional changes](#)

## **February 2001**

[Unemployment and supplementary measures of underutilised labour](#)

[Seasonal reanalysis of monthly labour force estimates](#)

## **May 2000**

[Status in employment data changes: correction](#)

## **April 2000**

[Using the unemployment rate series to illustrate the seasonal adjustment process](#)

## **February 2000**

Seasonal reanalysis of monthly labour force estimates

## **December 1999**

[Why are there differences between two seasonally adjusted measures of Australian total employment?](#)

## **November 1999**

[Industry, occupation and status in employment data](#)

Labour force status and other characteristics of families

## **October 1999**

[Labour force projections: 1999-2016](#)

## **April 1999**

Introduction of updated standard error estimates

## **February 1999**

[Revisions to monthly labour force estimates](#)

## **January 1999**

[Concordance between the first and second editions](#) of the **Australian Standard Classification of Occupations (ASCO)** - revised

## Related publications (Appendix)

### APPENDIX 3 RELATED PUBLICATIONS

Title	cat. no.	Frequency	Reference period
Labour force supplementary surveys			
Career Experience	6254.0	Discontinued	Nov 2002
Child Care	4402.0	Irregular	June 2005 reissue
Child Employment	6211.0	Irregular	Jun 2006
Education & Work	6227.0	Annual	May 2007
Employee Earnings, Benefits & Trade Union Membership	6310.0	Annual	Aug 2007
Forms of Employment	6359.0	Annual	Nov 2007
Job Search Experience	6222.0	Annual	Jul 2007
Labour Force Experience	6206.0	Biennial	Feb 2007
Labour Force Status & Other Characteristics of Families	6224.0.55.001	Annual	Jun 2007
Labour Force Status & Other Characteristics of Migrants	6250.0	Triennial	Nov 2007
Labour Mobility	6209.0	Biennial	Feb 2006
Locations of Work	6275.0	Irregular	Nov 2005
Multiple Jobholding(a)	6216.0	Discontinued	Aug 1997
Persons Not in the Labour Force	6220.0	Annual	Sep 2007
Retrenchment & Redundancy(b)	6266.0	Discontinued	Jul 2001
Underemployed Workers	6265.0	Annual	Sep 2007
Working Time Arrangements	6342.0	Triennial	Nov 2006
Multi purpose household surveys			
Barriers and Incentives to Labour Force Participation	6239.0	Biennial	Jul 2006 to Jun 2007
Retirement and Retirement Intentions(c)	6238.0	Biennial	Jul 2006 to Jun 2007
Work-Related Injuries(d)	6324.0	Irregular	2005-06
Sub-annual labour surveys			
Average Weekly Earnings	6302.0	Quarterly	Feb qtr 2008
Industrial Disputes	6321.0.55.001	Quarterly	Mar qtr 2008
Job Vacancies	6354.0	Quarterly	May qtr 2008
Labour Force	6202.0	Monthly	May 2008
Labour Force Characteristics of Aboriginal and Torres Strait Islander Australians, Estimates from the Labour Force Survey	6287.0	Annual	2007
Labour Price Index	6345.0	Quarterly	Mar qtr 2008
Wage & Salary Earners, Public Sector, Australia	6248.0.55.001	Discontinued	Jun qtr 2007
Other labour surveys			
Employee Earnings & Hours	6306.0	Biennial	May 2006
Employer Training Expenditure & Practices	6362.0	Irregular	2001-02
Labour Costs	6348.0.55.001	Irregular	2002-03
Confidentialised Unit Record Files (CURFs)			
Australians' Employment and Unemployment Patterns, CURF, 1994-1997	6286.0.30.001	Irregular	1994 to 1997
Australians' Employment and Unemployment Patterns, 1994-1997: Expanded CURF	6286.0.55.001	Irregular	1994 to 1997
Australians' Employment and Unemployment Patterns: Expanded CURF, Technical Paper	6286.0.55.002	Irregular	1994 to 1997
Child Care, Australia, Expanded CURF	4402.0.55.001	Irregular	Jun 2005
Child Care, Australia, Expanded CURF, Technical Manual	4402.0.55.002	Irregular	Jun 2005
Labour Force Survey and Employee Earnings, Benefits and Trade Union Membership, Australia: Basic CURF	6202.0.30.001	Biennial	Aug 2006
Labour Force Survey and Employee Earnings, Benefits and Trade Union Membership, Australia - Basic CURF, Technical Paper	6202.0.30.002	Biennial	Aug 2006
Labour Force Survey and Employee Earnings, Benefits and Trade Union Membership, Australia: Expanded CURF	6202.0.30.003	Biennial	Aug 2006
Labour Force Survey and Labour Mobility, Australia: Basic CURF	6202.0.30.004	Irregular	Feb 2006
Labour Force Survey and Labour Mobility, Australia: Basic CURF, Technical Manual	6202.0.30.005	Irregular	Feb 2006
Survey of Education and Training, Australia, Basic CURF, Technical Manual	6278.0.55.001	Irregular	2005
Survey of Education and Training, Australia, Basic CURF	6278.0.55.002	Irregular	2005
Survey of Education and Training, Australia, Expanded CURF, Technical Manual	6278.0.55.003	Irregular	2005
Survey of Education and Training, Australia, Expanded CURF	6278.0.55.004	Irregular	2005
Survey of Income and Housing - Basic and Expanded CURFs, Technical Paper	6541.0	Irregular	2005-06
Title	cat. no.	Frequency	Latest issue
Information papers and other reference material			
ABS Labour Market Statistics	6106.0.55.001	Irregular	2003
Australian System of National Accounts: Concepts, Sources & Methods	5216.0	Irregular	2000
Changes to ABS Measures of Employee Remuneration	6313.0	Irregular	2006
Changes to Labour Force Survey Products	6297.0	Irregular	2003
Estimating Average Annual Hours Worked	1352.0.55.077	Irregular	Jun 2006
Forthcoming Changes to Labour Force Statistics	6292.0	Irregular	2007
Labour Force Survey Sample Design	6269.0	Irregular	Nov 2007
Labour Force Survey Standard Errors	6298.0	Irregular	2005
Labour Force Survey Standard Errors, Data Cube, 2007	6298.0.55.001	Irregular	Nov 2007
Labour Price Index: Concepts, Sources & Methods	6351.0.55.001	Irregular	2004
Labour Statistics: Concepts, Sources & Methods	6102.0.55.001	Irregular	Apr 2007
Questionnaires Used in the Labour Force Survey	6232.0	Irregular	2004
Other publications			
Australian Economic Indicators	1350.0	Monthly	June 2008
Australian National Accounts: National Income, Expenditure & Product	5206.0	Quarterly	Mar qtr 2008
Australian Social Trends	4102.0	Annual	2007
Australian System of National Accounts	5204.0	Annual	2006-07
Australians' Employment & Unemployment Patterns: First Results	6286.0	Discontinued	1994 to 1997
Business Indicators	5676.0	Quarterly	Mar 2008
Census of Population & Housing: Selected Education & Labour Force Characteristics	2017.0	Five yearly	2001
Education & Training Indicators	4230.0	Irregular	2002
Employment Arrangements & Superannuation	6361.0	Irregular	Jun 2000
General Social Survey	4159.0	Irregular	2006
Government Benefits, Taxes & Household Income	6537.0	Irregular	2003-04
Household Income & Income Distribution	6523.0	Biennial	2005-06
Measures of Australia's Progress	1370.0	Biennial	2006
Regional Wage & Salary Earners - Electronic Publication	5673.0.55.001	Irregular	2003-04
Superannuation: Coverage & Financial Characteristics	6360.0	Irregular	Jun 2000
Voluntary Work	4441.0	Irregular	2006

(a) Latest data available on request for July 2001.

(b) Related data available from Labour Mobility.

(c) Previously conducted as a labour force supplementary survey until 1997, data now collected as part of the Multi Purpose Household Survey.

(d) Previously conducted as a labour force supplementary survey in 2000, data now collected as part of the Multi Purpose Household Survey.

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## Table 1.1 (I-Note) - Data Cubes

6105.0 Table 1.1: Measures of labour underutilisation is updated on an annual basis. It was last updated in the April 2008 issue of 6105.0.

## Table 1.2 (I-Note) - Data Cubes

This is the first release for Table 1.2. Experimental volume measures of labour underutilisation.

## Table 2 (I-Note) - Data Cubes

6105.0 Table 2. Employment type 1992–2007 is updated on an annual basis. It was last updated in this July 2008 issue of 6105.0.